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THE LEADING FLORICULTURAL JOURNAL IN THE REGION

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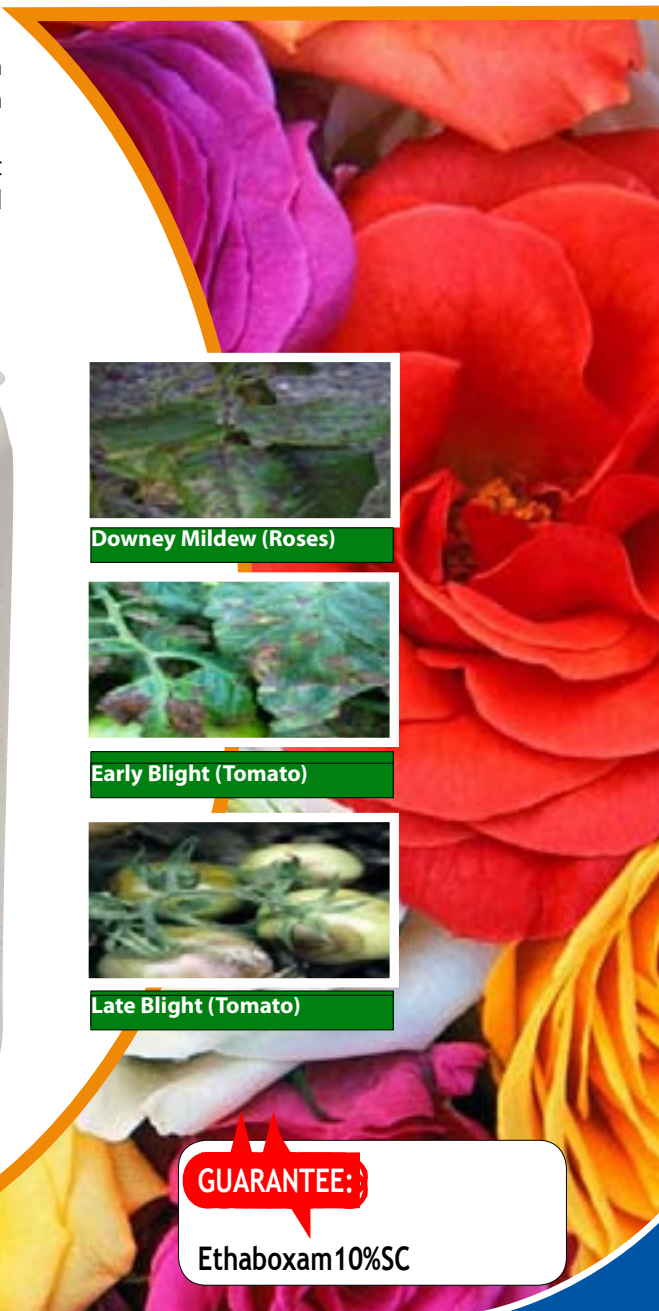
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The Leading Floriculture Magazine

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Philanthropy!

Boom or Doom! Those who listen to some NGOs with selective amnesia may ask. In this issue we are set to answer this question.

We will enumerate the efforts of Imarisha Naivasha and LANWRUA to restore the glory of the lake. Similarly,

we will see the efforts by the Naivasha farms to unite through NA-COHAG to help the community in fighting HIV, child mortality and caring for pregnant mothers among other diseases. Naivasha Horticultural Fair, the exhibition for the industry by the industry cannot play a second role. They have touched so many lives in the area.

To start us off, Lake Naivasha is a freshwater lake in the Kenyan Rift Valley. It is unique in that it is home to both an internationally renowned environmental treasure as well as a blossoming agriculture industry that exports high value fresh vegetables and cut flowers to European and English markets. The Lake is currently under intensive scrutiny over concerns about how its environmental integrity can be maintained whilst still supporting a valuable and growing economy and society.

Human activities in the past have tampered with the forests and environment at large hence the tributaries taking water to the Lake drying. Hence the issue of water in the lake receding been a serious problem with flower farms been blamed in several occasions.

The truth is, flower farms are comprehensive partner in waste management issues and environmental preservations that always strives for the highest quality possible. They cooperate with governments to set up long-term solutions that help generate income to the country.

Secondly, helping reconstruct a street boy emerging from the tough life in the Kenyan streets is not about the talk, it's about the walk. It's not about the what, it's about the how. And it's never about the will, it's about the will. But how can you get it right if you are on the wrong part of the world? Kenya Commercial Bank is doing it again this year. The bank is sponsoring the NH fair 2013. Their generous contribution in many areas has helped enormously. They have involved themselves in plentiful charitable projects which are of great help to the community at large. KCB has maintained a strong link with the horticulture sector in Kenya.

The corporate involvement in development in this regard has been left a-new concept based on the traditional belief that it is only the government that is mandated with the responsibility of initiating development. NH Fair has in this regard created a great possibility in a short time since it takes the government quite a while to study the feasibility of any needed project before approving and hence implementing it.

Have a Philanthropic reading.

Masila Kanyingi

Editor

Masila Kanyingi

Chief Sub-Editor

Wanjiku Kabeni

Editorial Assistant

Cornelius Mueke

Contributors

Nelson Maina
Andrea Disco
Barnabas Rotich
Ernest Muguku Muiru
Ruth Vaughan
Pauline Mugure
Enock Kiminta
Andy Koyo
Alex K. Mutuni

Photographers

Jairus Ndani

Circulation

Evelyne Ndiema

Marketing

Beatrice Kariuki
Benard Muendo
Wilbur Njemah

Graphic Designer

Evelyne Ndiema

Consulting Graphic Designer

Sam Kyalo

Editorial Consultants

Tom Ochieng - Penta Flowers
Victor Juma - Syngenta EA Ltd
Anampiu Kithinji - Dow Agrosience
Joseph Murungi - Bayer Cropscience
Charles Njuki - Homegrown
Francis Karanja - BASF
Samson Mwangi - Consultant
Daniel Kisongwo - Consultant
Richard Gitonga - Chemtura
Ezekiel Karanja - Greenlife Agro-sciences
Maurice Koome - Bayer Cropscience

Publishers:-

Scoop Communications

A member of JOLY INVESTMENTS

Railway Open Shed, Muki Room 13
P. O. BOX 79396 - 00200 Nairobi.
Tel: 2244892 • Cell 0722-558172,
Fax: 2244892
Email: info@floriculture.co.ke



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Tel: +254 (0)20 211 21 00/01/02/03, Cell: +254 (0)722 201 338 / +254 (0)733 201 338
Fax: +254 (0)20 210 7044 Email: fps-sales@fpsafrica.com



THE ROLE OF TRAINING IN HORTICULTURE

The Kenyan horticultural industry traditionally had a low level of interest in education and training, with formal qualifications being considered inferior to practical experience. One of the key criticisms of formal agricultural training is that it is heavily focused on the delivery of “academic” qualifications and does not have the capacity to adapt and respond to the industry's wide-ranging and changing skill needs.

Industry Standards and sophistication

The past decade has, however, seen the market increasingly embrace standards-based certifications schemes as a way of enhancing sustainability in agriculture and promoting pro-poor development. These certifications with their emphasis on Good Agri-Practices (GAP), social and environmental responsibility schemes have a "learning element" which requires training in a wide range of skills. Moreover, increased productivity relies on improved skills in efficient use of land, water, fuel and other inputs. This has meant that the businesses have become increasingly sophisticated with producers needing to have knowledge across a wide range of disciplines in order to remain globally competitive. Training therefore plays an integral role in helping the industry in these key challenges by arming it with skills required to survive, adapt and grow. Training engenders an increased capacity, confidence and willingness to change, to seek and adopt innovative technologies and best-practice management techniques, and to manage risk. It is well known that farmers who participate in training and education act more likely to be profitable and to change their practices to improve performance. The ever changing market conditions coupled with technological and scientific developments and new audit standards require that training courses (and indeed trainers themselves) adapt as fast as the market conditions. As new farming techniques and practices are developed to improve productivity, trainers must quickly gain the specific skills necessary to then assist industry to adopt and implement those practices.

Environmentally Intelligent Farming

Dudutech, the premier ICM/IPM company has over the years offered solutions to its clients in line with GAP. Indeed the remarkable levels of adoption of GAP witnesses today in the Kenyan horticultural industry are largely attributable to Dudutech. Training services on various aspects of environmentally intelligent farming methodologies offered to varied groups ranging from large multinational companies, consultants, and small-holder farmers to the custodians of GAP standards in the horticultural industry like Kenya Flower Council (KFC) has been the backbone of this remarkable achievement.

Accredited and long term practical experience

Our Directorate of Industrial Training (DIT) accredited training department has over ten years' experience in Training in Kenya and beyond. The department boasts four full time graduate trainers with vast knowledge and experience in the horticultural field. This team is capable of developing and delivering courses to meet the needs of a wide range of clients. All the trainers are also members of Professional Trainers Association of Kenya (PTAK), the national association dedicated to industrial learning and performance professionals, having undergone training of trainers (TOT) courses. Courses can be conducted either centrally at our well appointed state-of-the-art Dudutech Training Centre, or on farm, which tends to be logistically favourable to most clients as the workers are not off site for long periods.

Dudutech Training Courses

COURSE TITLE	COURSE OBJECTIVE	TARGET GROUP
Safe & Effective Use of Pesticides	Provide participants with a sound knowledge of pesticide usage, handling and storage in line with Good Agricultural Practices (GAP)	Growers, Spray-ops & Spray operators
General Pesticide Awareness	Enable participants to understand how to protect themselves from pesticide hazards at the workplace	General staff working in green houses, outdoor and indoor nurseries, path houses, and on farms
IPM Planter / Vegetable (Level One & Two)	Strengthen participant's knowledge and skills on the principles and practice of Integrated Pest Management (IPM) in environmental agriculture	Field workers, field supervisors, farm managers, and agronomists
Post-harvest Culleries / Vegetable Post & Harvest	Equip participants with industry level skills and expertise in the day to day post-harvest management of fresh produce and flowers	Quality Controllers, Post-harvest staff, Packers and Harvesters
Principles of Pesticide Application	Equip participants with knowledge & skills on Crop Nutritional and water use Management	Post-harvest Supervisors, Inspectors & Pesticide Supervisors
Inspection & Pesticides	Equip participants with basic knowledge & skills on Pesticides & Inspectors practices to effectively support crop production functions	Inspection and Pesticides Personnel
A Guide to Composting Agricultural Wastes	Equip participants with knowledge & skills on Composting as a technology for the recovery & recycling of biological waste into a valid product for agricultural production	Farm Waste handlers

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What threats for exporters arise from increasing transparency in the supply chain?

Consumers increasingly demand information on the whereabouts of a product, such as the origin, the (sustainable) production method or the decent work environment for workers. This trend is opening up distribution systems, turning them into transparent supply chains with all kinds of positive effects.

For a research on tropical commodities exported into the EU, I want to find out whether any downside effects or risks may exist too from the increasing transparency.

What threats relate to an increased demand for information and transparency? What are the costs for exporters? And how can these threats be overcome?

Anima Ruissen • I understand threats here as threats which you use in a SWOT analysis. Meaning that a threat is coming from something external which you do not have (yet) much influence on, but where you can adjust your strategy/ operations for in order to 'maintain' it or even turn it into an opportunity.

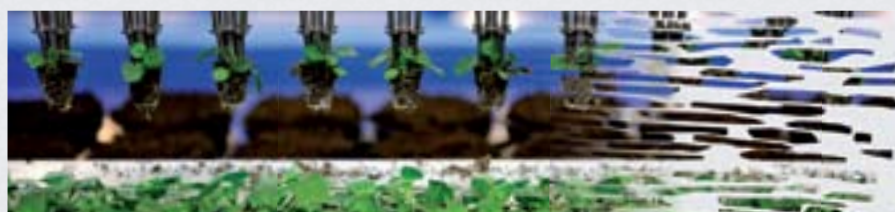
It might not be entirely clear what negative effects exactly can be when giving more transparency. I think certain problems can arise (but do not know whether the effect will be negative). For instance, when talking about a composed product it is difficult to trace every component from the whole system. Nevertheless, it is not impossible, as they are trying to do this in the Wal Mart sustainability consortium.

Costs might rise (administrative work, adjustment of information technology systems), depending on what kind of system you use. When information technology is good/ accessible/ reliable, it can also add other values; being a reliable partner,

taking away distrust from buyers. On the other hand, when you do not take care of your information/ communication sharing, the effects might turn into a negative reputation for your company; not professional, does not say what it communicates. And those effects can be there for a long term (it takes time to build trust and just a second to destroy it). What exactly are the tropical commodities you are talking about?



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Secondary Damage by Nematodes Makes Diagnostization Difficult

By Andrea Disco, Dep. Plant diseases, Relab den Haan



Host Plants And Symptoms Variable

The amount of hosts differs per kind of nematode. Some nematodes have a great variety of host plants, e.g. the root lesion nematode *Pratylenchus*. Crops which are not susceptible for this nematode are rather uncommon.

Other nematodes have much less host plants, like *Ditylenchus*. Especially *Ditylenchus destructor* can cause severe economical damage to for example potato and several kind of flower bulbs. Once a plot of land is infected by *Ditylenchus* it is recommended not to grow susceptible crops for years! Other real common nematodes are the root knob nematode *Meloidogyne* and the leaf nematode *Aphelenchoidus*.

In Holland *Meloidogyne* is a very important plant pathogen in greenhouses, but they also appear in cultivations grown outside. *Aphelenchoidus* can cause malformation of above ground parts of the plant.

Secondary Infection

The amount of damage caused by nematodes is in the first place due to the number of nematodes that



attacks the plant. But besides that, the wounds caused by these nematodes give other pathogens, like fungi and

bacteria, also a simple entrance to the plant. There are also some nematodes, like *Xiphinema*, who are able to transfer plant pathogenic viruses. Roots damaged by nematodes are more susceptible for drought. Further, damaged roots have less uptake capacity of water and nutrients and that can result in deficiency problems in the crop. All these secondary symptoms make it often difficult to diagnose the original infection correctly.

Fast Recognition Prevents Serious Damage

There are several procedures possible when a plot of land is infected by nematodes. The efficiency of them varies. Following a plot of land or growing a insusceptible crop is a possibility. (In Holland) There (still) is a limited amount of chemicals available to treat nematodes. Examples are Monam (metamnatrimum) and Basamid (dazomet). Biologically there are a few possibilities, like growing African marigold and applying the nematode capturing fungus *Arthrobotris*.

Inundation, keeping the soil covered with a layer of water for a certain period, is effective for some kind of nematodes, on condition that the period of submerge is long enough, six until ten weeks, and the soil temperature is high enough, at least 17 degrees Celsius.

For a successful treatment it is extremely important to set the right diagnose as soon as possible. Many institutions among them Relab den Haan can check the soil or the crop on the presence of nematodes for you and can also identify them. This will only take three days which able you to choose the optimal treatment as soon as possible.

Crops grown on soil often suffer damages due to nematodes. Not all nematodes are plant parasitic. On the contrary, far the most of the nematodes present in soil are saprophytic. They live from organic debris, bacteria and fungi.

In just one gram of soil thousands of nematodes can be present. Only the plant parasitic nematodes harm the crops. In contrast with saprophytic nematodes, the plant pathogenic nematodes have a stylet.

With this stylet they pinch into the cell wall and excrete enzymes which damage or destroy the cell. In reaction the plant shows symptoms like lesions or necroses, root knobs, malformation of leaves or roots, twisted stem or leaves, interruption in growth, etc.

Especially, free living or not free living, root nematodes can cause severe damage. They hinder not only the uptake of water and nutrients but also the transportation of these. In case of serious damage the plant can even die.

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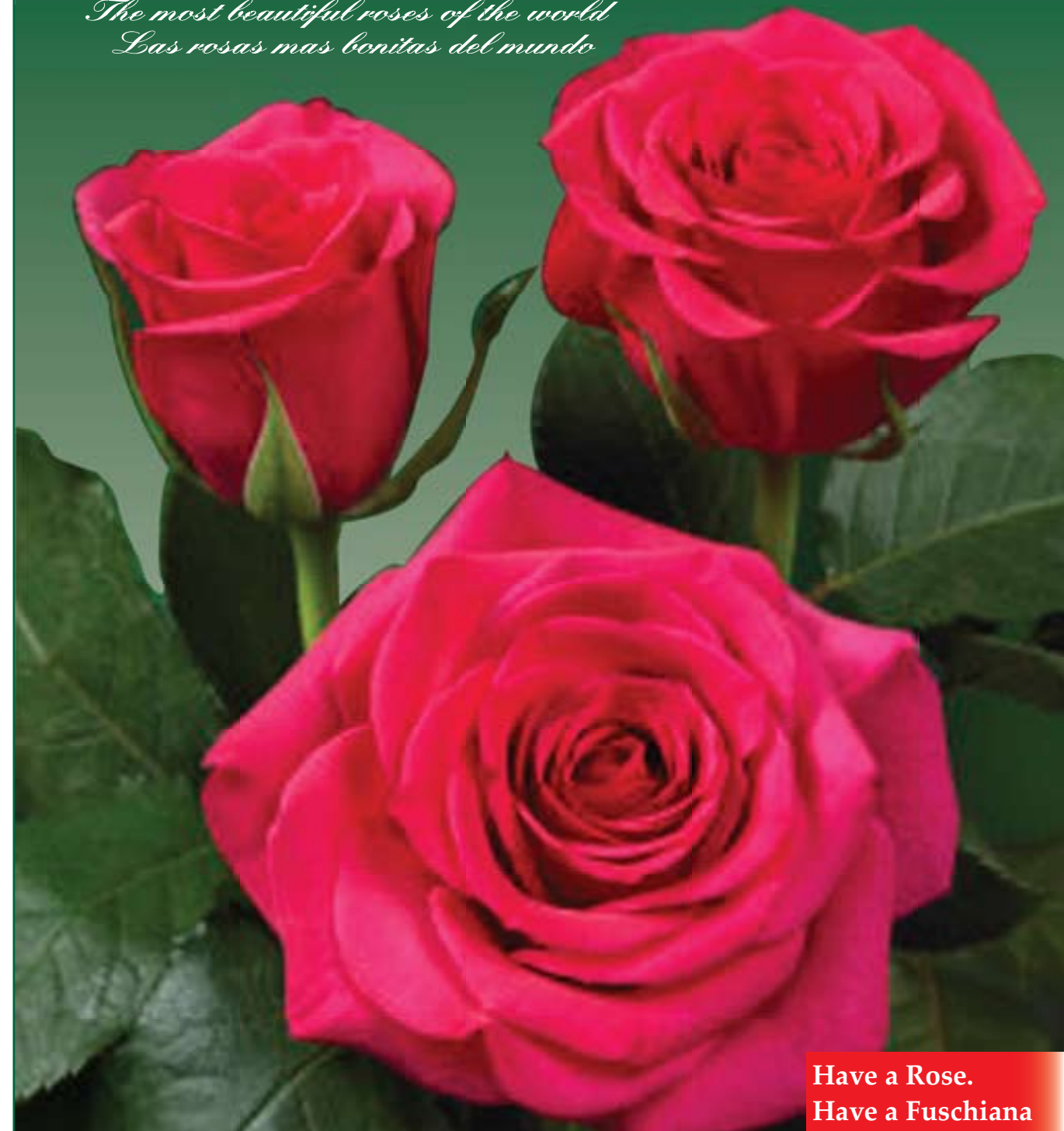


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REVISED VAT BILL 2012 – WHAT CHANGES DO I EXPECT

By Ernest Muguku Muriu.

It was elated to hear reports that the Minister of Finance has, on 7th August 2012, accepted to make changes to the proposed Value Added Tax law.

In addition to all the changes raised by several commentators which include return of medical, educational and agricultural inputs to zero rating and exempt status, return of the tax remission provisions within the VAT laws; what other changes do I expect to see in the revised VAT Bill.

Floriculture business whose produce is exclusively for the export market should be given the same status as an Export Processing Zone (EPZ) company in paragraph 2 of Second Schedule Part A – Zero Rated Supplies. Paragraph 2 will therefore be expanded to read as follows

The supply of goods or taxable services to an export processing zone business as specified in the Export Processing Zones Act (Cap.517), as being eligible for duty and tax free importation or to a producer and exporter of cut flowers.

By granting this zero rating status for supplies made to cut flower exporters, the perennial refund problem shall be

eliminated permanently, improving cash flows for businesses in this sector and as a result the cost of financing and production therefore increasing the competitiveness for the Kenyan produce in the global market.

The proposed definition of “supply of services” includes ‘the toleration of any situation or the refraining from the doing of any act’.

This definition is too broad in my view and any act that was not intended to be a sale may be defined as a supply. Take for example a squatter on one’s property, while it was vacant.

This can be taken to be a sale within this definition and therefore subject to tax. This definition needs restrictions to be set through clear rules of application, to avoid any potential abuse from a broad interpretation by the revenue authorities to the detriment of a tax payer.

The bill does not provide time limits and penalties on the revenue authority for processing and paying refunds to tax payers.

The revised bill should require, under section 17, the revenue authority to make refunds within 30 days from when the tax



payer has lodged a claim. Where payment is not made within the time specified, an interest of two per cent per month or part thereof of the tax refunded shall forthwith be due and payable:

Under sections 17 and 18 of the Bill, the tax payer should be allowed to make an election, where input tax exceeds the amount of output tax due for the period, to either carry forward the input tax deductible in the next tax period or to receive a refund for the amount.

This will be useful in the event a tax payer has made heavy capital expenditure that may have a significant impact on his cash flows.

The bill has introduced the option for a tax payer to seek rulings from the commissioner regarding the application of any part of

the VAT law to a transaction entered into, or proposed to be entered into, by the registered person.

This will be very useful for a tax payer where he is unsure of the impact of the Act on a transaction and will pro actively reduce any negative impact.

However section 74 does not give the commissioner a time line for giving or refusing to give a private ruling and the implications for his inaction.

The revised bill should set a time limit of 30 days for the commissioner to give his decision.

In the event for any inaction on his part, the tax payer shall have all penalties automatically waived for any reasonable interpretation of the VAT law.

Ernest Muriu, a senior Partner with Ernest Muriu and associates has a wide knowledge of the Floriculture sector. ernest@synergy-accounting.com

KRA Working With Treasury to Address the VAT Refund Issue

The Chairman of the Kenya Revenue Authority Hon. Maj. Marsden Madoka said KRA was addressing the concerns of tax payers on VAT refunds which have been a thorny issue in the recent past.

He said this while addressing the Flower industry stakeholders during the Kenya Flower Council 14th Annual General Meeting, held at Finlays Horticulture – Kingfisher Farm, Naivasha.

He reported that the current refund bill to the private sector stands at Kshs 24 billion. He also said that



KRA was working closely with the Treasury to address the issue. “Delays results from inconsistent claims forcing KRA to spend time to determine their validity”, he said. Adding, “unavailability of funds is a

key reason for the delays, out of the total annual revenue collections, KRA is entitled to a maximum of 2% but we only gets an average on 1.3% to the total collections from the Treasury which is not

adequate to cater for all KRA operations”. To ease the situation KRA should be allowed to retain their portion instead of handing over all the collected revenues to Treasury for them to later give them their share which is not always released on time. For this to happen, it will require an amendment of the current relevant law.

Mheshimiwa Madoka expressed KRA’s commitment to enhance service delivery to expedite outstanding claims. More efforts to hasten validation of exports in the Simba system will be spent to clear the refund backlog.

KFC Annual General Meeting a Triumph

The Kenya Flower Council held its 14th Annual General Meeting recently at Finlays Horticulture Ltd-Kingfisher Farm, Naivasha. The event was graced by the chairman of Kenya Revenue Authority Hon. Major (RTD) Marsden Madoka.

The Board of Directors under the chairmanship of Mr. Richard Fox were retained to drive the activities of the Council for the next year. The colorful occasion attracted both the producers and associate members of KFC.

It was refreshing to have the presence of partners of the floriculture industry amongst them representatives of In his speech, Mr. Fox

thanked the KFC members for entrusting him as their Chairman urging them to continue supporting him steering the industry. He added that the KFC is pursuing the resolution of the VAT refund issue relentlessly. He in addition applauded the Government’s investment in infrastructure. Mr. Fox said KFC membership to the Union Fleurs has been extremely useful in the ongoing EAC-EU –EPA Negotiations. He expressed his confidence that the outstanding issues will be resolved in time for signature by July 2014.

It is also through the Union Fleurs that KFC participates in the Flower Sustainability

Initiative (FSI), which seeks to harmonize standards at the international level. He urged members to focus on an all-inclusive industry strategy; one that amplifies their strengths and transforms their weaknesses and threats into further opportunities, at the individual farm, the KFC and the country level.

In terms of Industry Self –Regulation, the Chief Executive Officer Mrs. Jane Ngige said KFC is now fully accredited to issue the KFC Silver CoP alongside the GlobaGAP, FFP, KS1758 as well as TESCOS Nurture Certificates. It’s hoped that KFC will attain benchmarking to Fairtrade and Rainforest Alliance


soon. Recently, the KFC acquired the National Environment Management Authority (NEMA) Lead Auditors Registration for Environmental Impact Assessment/ Environmental Audits (EIA / EA) License.

As a result, growers are enjoying multiple certifications at a fraction of the cost. It is anticipated that an ongoing national mechanism project for industry wide compliance will add impetus to self-regulation. She acknowledged the support of KFC members in gaining the recognition the Council enjoys from stakeholders, standing tall amongst peers. The event was crowned with a tour in the farm.


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Flower Growing in Naivasha

A Boom Or Doom



Lake Naivasha is a freshwater lake in the Kenyan Rift Valley. It is unique in that it is home to both an internationally renowned environmental treasure as well as a blossoming agriculture industry that exports high value fresh vegetables and cut flowers to European and English markets.

The Lake is currently under intensive scrutiny over concerns about how its environmental integrity can be maintained whilst still supporting a valuable and growing economy and society

Agricultural activity in the basin has expanded dramatically in terms of both the rural smallholder farmers in the upper catchment and the high value exported commercial horticulture around the Lake and this sector anchors a local economy that supports almost 650 000 people.

The two most valuable crops in the Naivasha basin are cut flowers and vegetables. The vegetables grown in Lake Naivasha contribute approximately KSh6.65 billion (\$95 million) to the Kenyan economy. Whilst predominantly

focused on producing for the local market, smallholders are increasingly able to access high value export markets through their association as "out growers" with the commercial vegetable farms.

Kenya is also one of the world's largest exporters of cut-flowers and Lake Naivasha is at the heart of the nation's floriculture industry, accounting for more 70% (KSh 28 billion) of the country's cut flower exports. The Naivasha basin involves a broad group of stakeholders including large

horticulture companies and their employees, the out growers and small holders, local government and basin inhabitants, and those dependent on the broader Kenyan economy and trade.

For an agriculture-based economy that is completely dependent on its water resources for economic production, the social, economic, financial (investment), regulatory and reputational risks associated with a deteriorating biophysical environment are significant. Given its linkages to the national economy and the

international export markets, these risks are not localized within the basin but extend through to the rest of Kenya. One must ask what risks are for each of these groups and also highlight the commonalities between them, or in other words the shared risks between corporate, government and civil society stakeholders.

In so doing, these stakeholders can recognize the incentive for a common consensus in mapping out a path to achieving improved water resource management in the basin and the future economic and environmental sustainability of Lake Naivasha.

It is important to recognize that the shared risk framework is not linear and does not fall within a conventional quantifiable cost-benefit metric. A reduction in abstraction for commercial farmers has knock effects in terms of employment; export earnings, livelihoods and social tensions. The manifestation of these risks is highly uncertain, but the implications are potentially significant.

Despite past severe droughts, it is unlikely that the water resources situation would cause such severe and sustained physical deterioration that major irrevocable economic impacts will be experienced in the local economy or that individual companies will fail financially, in the short term. However, it is highly likely

that some level of local economic and corporate financial impacts will occur during crisis periods of drought, water quality deterioration and/or wetland degradation.

In the future, increasing urban - agricultural abstraction and increasing temperature - climate variability, is highly likely to impact on the recurrence and severity of

crisis periods. Similarly, the already significant developmental pressures on this area will increase over time, due to population pressure and economic growth in the country as a whole.

Lake Naivasha provides an important opportunity to support social and economic development in Kenya in an ecologically sustainable manner, but

these opportunities may be squandered without adequate engagement of the risks. Three areas of focus may be identified in responding to these risks and opportunities: Risk mitigation requires improved institutional arrangements, to support a clear definition and management of the availability of water and the rules for its use in the different parts of the catchment. Innovative

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partnerships between government, private sector and/or civil society organisations should be fostered to address problems in and around the lake.

Progressive horticulture companies should develop Naivasha specific water stewardship standards and gain both competitive

distinction and reputational "immunisation" by gaining accreditation by a recognised body.

Cut-flower farming

The flower farms surrounding the Lake growing 1,900 hectares of cut-flower of which 1,200 are grown in greenhouses. Roses make up about 75% of Kenya's annual

agricultural production, followed by mixed flowers (8%), hypericums (3%) and carnations (2%). The Naivasha basin accounts for 70% of Kenya's cut flower exports and generates approximately 9% or KSh27.8 billion (approximately US\$ 400 million) of Kenya's total foreign exchange revenue. It is estimated that 45% of

the revenue generated by a typical cut flower farm is spent on production costs at the farm. This would imply that the contribution of the floriculture industry to Lake Naivasha's local economy is approximately KSh 12.6 billion (\$180 million). It is estimated that the flower industry employs approximately 40 000 people in Naivasha directly and over 350,000 indirectly.

Institutional Arrangements
Through a combination of consumer and buyer pressures, the private sector has made some significant strides in self-regulating water use in commercial farming operations. The Lake Naivasha Growers Group (LNGG) is a commercial farming body that has its own code of practice relating to water use and environmental impacts that its members have to follow.

Given the greater consumer awareness in the international markets, many of the supermarkets and buyers make it compulsory for the commercial farmers to follow the requirements of different certifications, which put down certain standards in terms of water use, environmental standards, operational health and safety and labour relations.

However, it is clear that upstream small holder farming has an impact on the hydrology of the basin, which is largely not addressed by these

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Hippos in Lake Naivasha

certification processes.

Investment Risk

The increasing public awareness around water has contributed to investors considering water risk in their financing of equity and debt. Carbon Disclosure Project Water Disclosure initiative has been launched.

Some banks and fund managers may start to make investment decisions around water considerations. The likelihood of this risk is quite high and is not directly linked to periods of crisis (as with the other risks), but is associated with investor perceptions around physical, social and institutional risks.

In view of this, Naivasha is likely to be viewed as high risk in an international context and therefore financial institutions may place a premium on debt and equity associated with companies operating in Naivasha.

Economic-financial Risk

The point has been made above that all of these other risk will eventually have economic consequences at a local economy, national economy or international trade economy level.

Horticulture and small-holder farming is the mainstay of the local economy, which is by far dominated by the cut flower industry. While Naivasha and the horticulture industry do have a national impact, this is relatively small (<3%). However, it does have a significant (>10%) impact on export earnings and thus the current account.

Any negative consequences for these exports related to the above risk areas, will have direct impacts on the country's foreign exchange, as well as possibly indirect investor perception issues. From this perspective,

the management of risk in Lake Naivasha must be taken seriously at a national political, economic and planning level. Similarly, any negative impacts on horticulture companies' operations associated with the above mentioned risks might have impacts on their financial position and profitability.

While these companies have made investments in the region, increasing risk may cause them to relocate to other regions with lower risks. This may have significant impacts on the local and national economy. Assessment of the economic risk is a synthesis of all the other risks, which in turn are largely dependent upon the physical risk.

It is unlikely that the current situation would cause such severe and sustained physical deterioration that major irrevocable economic


impacts will be experienced in the local economy or that individual companies will fail financially.

However, there is highly likely that some level of local economic and corporate financial impacts will occur during crisis periods, largely associated with reduced crop yields associated with reduced water abstraction and/or higher pumping costs from the farms that are directly dependent upon the lake and its surrounding groundwater.

Conclusion

In conclusion, the shared risk of the private and public sectors around the water resources of Lake Naivasha has been reframed as a shared opportunity for future social and economic development of the basin in the interests of all the people in the region. It is through this lens that the lake is being reclaimed.

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The KCB Naivasha Horticultural Fair 2012 BUILDING BETTER LIVES!

The KCB Naivasha Horticultural Fair will be 10 years old this year. Starting from humble beginnings in 2002, the Naivasha Horticultural Fair has grown to be the biggest and best Horticultural Show in Africa. From an initially purely horticultural perspective the NHFAIR is branching out into the whole agricultural sector. Every year the number of stands and the number of visitors increases, from 60 stands in 2002 to over 180 stands in 2012.

The relaxed atmosphere and spacious venue attracts the crème de la crème of the agricultural sector. Many exhibitors take the opportunity to launch new products and innovations at the NHFAIR, so as a visitor you have a one-stop venue that gets you in contact with all your suppliers, and

you are also kept informed on all the new market trends – very important in a fast evolving business. Decision makers from both sides of the industry attend, and a lot of business is concluded. There is ample parking, loads of space, a great food hall and a children's entertainment area. So not only can visitors catch up on business, they can combine it with a family day out.

The NHFAIR is run by a small organising committee that operates on an entirely voluntary basis. The Exhibitors and visitors are proud to know that 100% of their donations go to good causes. Every year more and more funds are raised for charity and are dispersed through the NHFAIR Trust. The NHFAIR partners with

other donors in order to increase the effective value of donations and to raise the awareness of its projects.

Long term donor partners include The Naivasha Rotary and NTM. The NHFAIR Trust concentrates on poverty alleviation and improving the lives of woman and children according to their motto 'Building better lives'. NHFAIR supports the following major Charities;- Naivasha Safe House (abused woman and children), the Naivasha Children's Shelter (giving kids a chance), NACOHAG (HIV and AIDS and family health), Karagita Maternity Hospital and the Naivasha General Hospital Maternity Wing (reduction of maternal and infant mortality during childbirth), United Disabled Persons of Naivasha, KSPCA, and Rotary.

Naivasha

Horticultural Fair

2012
Our 10th Anniversary

DATE:
Friday 14 - Sat 15 SEPT. 2012

VENUE:
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AFRICA'S LEADING AND FASTEST
GROWING TRADE FAIR - 10th Anniversary

NHFAIR has funded emergency life saving services through the Aga Khan Trust, sponsored educational support and continue to supply desks, chairs, water tanks, trees, and sanitation blocks to many schools. Over the years millions of shillings have been raised and wisely spent, making a massive difference to people's lives. Most Charities will be represented at the NHFAIR so visitors and exhibitors can see exactly where their money goes, and how much it helps.

In 2011 the NHFAIR launched its most ambitious project yet ADOPT A VILLAGE. The NHFAIR has undertaken to sponsor a whole village, including schools, a clinic, a borehole, power. This is a work in progress. Come and read all about it at the show.

What makes the NHFAIR such a success?

People and Support: the tremendous support and professionalism of its sponsors, exhibitors and visitors makes it the success it is today. Location is important. The NHFAIR has always been based in the grounds of Naivasha Sports Club, with beautiful surroundings and plenty of space. Naivasha is a major horticultural zone, and host to many of the Rose Breeders Showcases and farms, it is close to Nairobi and the International Airport, and there are lots of great places to stay and wonderful things to do there.

Generosity.

The generosity of a myriad of people and organisations mean that operating costs are kept low. Many give up their time to make sure that NHFAIR runs smoothly. Over the years the NHFAIR has been supported by Mike and Sarah Higgins, Nini Ltd, Vegpro, Duncan Adamson

(Aquavalley Services), ARN Security Consultants, the Naivasha DC and DO, The Naivasha Police and CID, The Naivasha Children's Shelter, De Ruiters East Africa, the Committee and Members of Naivasha Sports Club, The Rotary Club, not to mention the organising committee themselves!

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- Offers long residual control at a low cost per day
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- It is safe on bees and other beneficial insects
- Methoxyfenozide is compatible with IPM programs
- Methoxyfenozide has a uniquely different mode of action, excellent in resistance management.

Mode of Action

Methoxyfenozide is an Insect Growth Regulator (IGR). It interferes in the development process of an immature lepidopterous insect.

Not all IGR's have the same Mode of Action (MoA)

- Ecdysone mimic - It mimics and competes with the natural hormone, ecdysone, for its receptor
- Initiates a pre-mature and lethal molt to caterpillars
- Effects are different from chitin biosynthesis inhibitors and juvenile hormones mimics and take place over a much shorter time period

Uptake Path

- Almost exclusively by ingestion: stomach poison
- Very limited contact activity
- Some translaminar activity
- Excellent rainfastness and residual activity
- Primarily affects young larvae; ovicidal effect in some species.
- Adult fertility and fecundity effects also observed in some species
- For all these reasons it is very important to have exceptionally good coverage and to apply it earlier.

Biological Properties

- Larvae feed on treated foliage and stop feeding in 2 -14 hours
- Molt starts but larvae unable to complete cycle, though still able to move but unable to feed
- Inability to complete molt causes dehydration and loss of hemolymph leading to desiccation
- Larvae are inactive or uncoordinated and extrusion of hind gut occurs
- Insect unable to feed and starves
- Death occurs in several days

Ovicidal Effect

- Ovicidal effects have been reported on key pests, but activity varies depending on species and timing of application with regard to oviposition of eggs.
- Eggs laid on treated surfaces are more susceptible than eggs exposed to treatment after oviposition.

Runner can affect population dynamics by indirect effect on adult reproduction. When adults are exposed to residues of methoxyfenozide;

- Females produced significantly lower number of eggs than untreated ones (lower fecundity)
- Eggs laid by affected females infertile and males produce less number of viable sperm thus larger percentage of infertile eggs
- Multi-year population level effects in some species

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Naivasha Horticultural Fair Turns NACOHAG into a Thriving Local NGO

Naivasha HIV/AIDS group (NACOHAG) was established in April 2003 by Dr Sally Brewerton as a response and intervention to the increasing adverse effects of HIV/AIDS in the local community in which it is deeply rooted.

The board of directors are from the major stakeholders within the community. In 2006 NACOHAG was registered as NGO and has been accredited by the National AIDS and STI Control program (NAS COP) as a Voluntary Testing and Counselling (VCT) service provider.

NAS COP has also trained all their counsellors. In 2007 NACOHAG emerged as the best VCT in Rift Valley. It is staffed and governed by

committed and qualified professionals both medical and managerial.

NACOHAG has had a relationship with NHFAIR for the last 7 years. "We appreciate the role that the FAIR has played in turning NACOHAG to the organization it is now.

A thriving local Non-governmental organization that is committed to serve the NAI VASHA and especially KARAGITA area so that the community access affordable and quality health care services" says Pauline Mugure the Co-ordinator.

The fair has donated benches for the waiting bay and constructed a fume chamber for the LAB

enabling NACOHAG screen TB cases. They have also funded the purchasing of a centrifuge for the LAB, a HB machine, an AUTOCLAVE for sterilization, a set for IUCD insertions (family planning)

In addition to the purchases, they have supported the clinic by paying 6 months' rent in 2009 when the clinic started, supported the clinical officer to attend ophthalmology (eye care training) at St. Mary's hospital for six months and supported the clinic to put up a sign post.

Through this support the clinic has grown from strength to strength and are able to offer quality services to the beneficiary community. As a result of

the partnership with NHFAIR they have been accredited by NHIF for outpatient services and shall be able to serve an even larger population.

"We are very grateful for the commendable work that NHFAIR continues to do in the community and for the fact that unlike other donors; NHFAIR supports grass roots organizations who would otherwise find it difficult to operate" concludes Ms Mugure.

Though not entirely, NH Fair has enabled NACOHAG work amongst the populations in and around the town as well as in the various farms engaged in the production of flowers.

For the 8 years NACOHAG has been operation, a value system has been nurtured which has gained considerable local goodwill and an appreciation expressed by the communities that NACOHAG serves.

Central to organizations ethics, is a participatory approach to care that aims to empower people at all levels of the community.

Their core objective is to train the community it serves, establish and equip VCT centers, undertake awareness campaign on behaviour change, manage and operate a medical centre at Karagita Market Area, Hell's Gate Division of Naivasha District, promote and co-ordinate primary Health Care Programs in the project areas, train and equip farm workers on social cultural dimensions and conduct medical mobile outreach services.

Nacohag offers a fully equipped and staffed HIV testing and counselling center in Naivasha town and a mobile HIV Testing and counselling provision to the community. They also give comprehensive range of affordable health services and free CCC clinic offered from an accessible clinic in Karagita.

In addition, they facilitate post Test Clubs and peer educators program community mobilization and HIV awareness and prevention initiatives

and Community medical outreach programs. The health clinic services are offered at considerably discounted rates that can be affordable by the beneficiary communities.

The medical centre provides a pleasant and welcoming environment as well as offering a high quality service with well governed care and treatment facilities. NACOHAG aims at all times to provide health care services for local communities and those in most need.

NACOHAG has considerable and proven experience in offering participatory peer education sessions on HIV/AIDS myths and misconceptions, HIV transmission, behaviour change communication, nutrition and wellness and positive living, reproductive and sexual health, sexually Transmitted Infections, family Planning, TB and its management, disclosure and managing opportunistic infections, the self concept, stress and stress management, gender and social cultural dimensions including gender based violence.

NACOHAG organises the annual women's football event held every August. As women have been found to be more vulnerable to testing positive to HIV than men, mobilizing women and highlighting the issue of HIV/AIDS is a NACOHAG priority. Educational messages



delivered via the healthy and fun medium of sport has helped NACOHAG's work in preventing new infections and encouraging women to come forward for testing.

Those who attend VCT testing become PTC members. Members support NACOHAG's work by encouraging people to come for testing.

They provide a peer led approach that involves peers communicating directly with farm employees, about HIV prevention and strategies that can lead to behaviour change.

In addition, community mobilization is achieved through inter-farm drama and poetry competitions

that involve message related to HIV/AIDS. NACOHAG also work with local communities to commemorate World AIDS/ Red Ribbon Day.

Nacohag conducts Medical Outreaches for hard to reach areas and to the pastoral communities in collaboration with the District medical officer of health office.

Service provided in the outreach sessions include family planning education, eye clinics, child welfare clinics (immunization), capacity building for traditional birth attendants, HIV Testing and Counselling and de- worming for the children. Referrals for more specialized treatment and care is done



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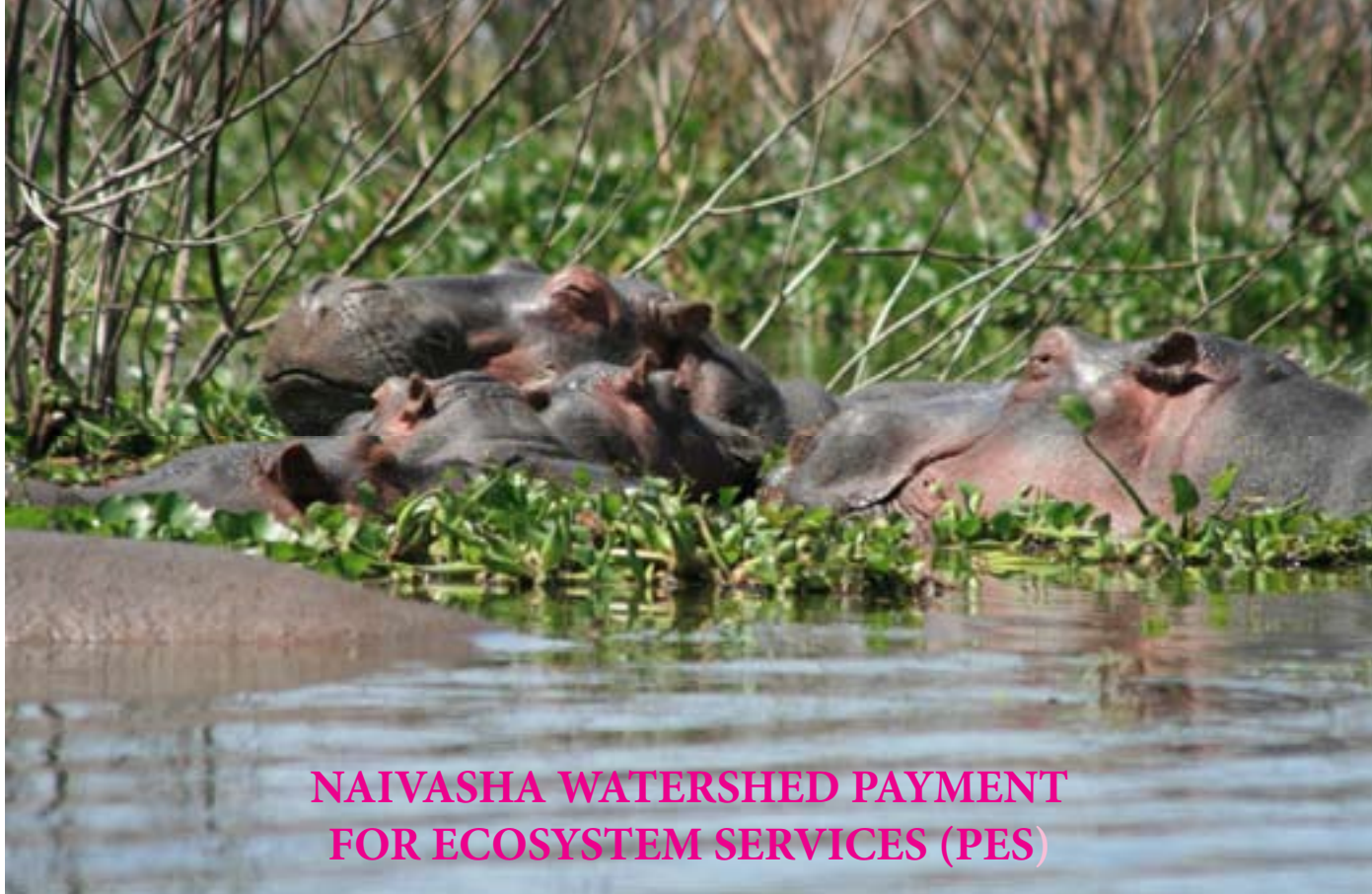
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NAIVASHA WATERSHED PAYMENT FOR ECOSYSTEM SERVICES (PES)

BACKGROUND

Payment for Environmental Services (PES) is a market-based mechanism where land owners are rewarded by service beneficiaries. It is based on the premise that land owners undertake land use transformations that provide agreed ecosystem service. For this service, they are rewarded financially by the beneficiaries.

This linkage requires contractual agreements negotiated between the ecosystem stewards and ecosystem beneficiaries, making PES a unique benefit sharing mechanism. In this case, Lake Naivasha Water Resource Users Association (LANAWRUA) on behalf of service beneficiaries agrees

to compensate land owners under Upper Turasha-Kinja and Wanjohi WRUAs. These land owners transform their land-use by foregoing some income for the purpose of agreed environmental service-good quality water.

In pursuit of this mandate, the project addresses the problem of heavy soil sedimentation within the Malewa River which is a major cause of massive eutrophication in Lake Naivasha downstream.

In fact so grave is the situation that there are fears that if no urgent remedial action is taken, the lake ecosystem will totally collapse in the next ten years.

This would have an unprecedented negative impact on the tourism, horticulture, power generation and

fishing industries that rely on the lake waters for their success.

The project is also expected to benefit farming households within the target areas through promoting the adoption of sustainable and improved land use practices (like the use of grass strips, river bank protection and agro forestry).

Conservation efforts in the upper catchment include:

1. Rehabilitation and maintenance of riparian zones
2. Establishment of grass strips and terraces
3. Rational fertilizers and pesticide use
4. Agro-forestry
5. Training communities towards enhancement of livelihoods



Water Resources Director, Mr John Nyaoro (left) receives a cheque from LANAWRUA chairman Mr. Richard Fox (right) before handing it over to the Upper Turasha WRUA members (seen behind).

The Rewarding System

Lake Naivasha Water Users Association (LANAWRUA) on behalf of service beneficiaries agrees to compensate land owners in the program for the effort to undertake land-use transformation whereby they forego some income for the purpose of agreed environmental service – good quality water. A total of 36.6 Ha (90.44 acres) is currently under conservation through the PES initiative.



Buyer PES Bundles

Hoteliers (Lodges & Resorts) Thresholds	Amount
5&4 star	250,000
3&2 star	150,000
Not rated&1 star	80,000
Camps	80,000
Irrigators, Commercial users, & Ranchers	Amount
Thresholds (Water use)	
Upto 250 m ³ per day	80,000
250-750 m ³ per day	150,000
750 m ³ per day	250,000



The amount in the bundles however does not limit what one can give and instalment arrangements can also be made. In return they get the following:

- Raise profile through media for PES buyers
- Certificate of appreciation
- Free advertising space on the LANAWRUA website

Progress

- Feasibility studies to establish solid verifiable business cases PES in Naivasha watershed.
- Hot spot farms selection, mapping & marking,
- Engagement of potential buyers - LNGG, flowers buyers abroad and other water users downstream,
- 470 farmers paid in phase one, 2009, a cheque of USD 10,000 by CARE and LNGG,
- 565 farmers paid in phase two, 2010, a cheque of USD 10,000 by LNGG members,
- A total of 36.6 Ha (90.44 acres) put under conservation,
- Expecting another 200 farmers to join scheme in 2012 with an additional 6.5 Ha (16.06 acres) to be put under conservation but with more buyers on board more farmers can be included and hence more land under conservation,
- A PES committee is now in place consisting of representation from Water Resources Management Awareness (WRMA), Imarisha Naivasha, LANAWRUA, Upper catchment WRUAs and WWF as co opted members.

Future Plans

Plans are underway to see to up-scale the scheme internally and externally by engaging more buyers and sellers to increase the area covered for conservation. We are hoping to engage 765 farmers in phase three before scaling up to other wruas in the next phases. There are efforts towards institutionalizing PES in the policy framework and combining Reducing Emissions and Degradation (REDD) and PES. Market linkages for the PES small scale farmers to markets for improved livelihoods.



Flower Growers Partner with Imarisha to Conserve Lake Naivasha.

Flower farms surrounding Lake Naivasha have been critical in supporting conservation of the lake. One Key initiative is the supporting of Imarisha Naivasha initiative.

Imarisha, Lake Naivasha Basin Management Board was gazetted by the Government of the Republic of Kenya in May 2011 to undertake restoration and lead in prompting sustainable natural resources management within the Lake Naivasha Basin.

At the inception, Imarisha Naivasha Board identified key challenges that required immediate 'no regret actions' to be implemented in partnership with stakeholders in the basin.



Imarisha Naivasha board has supported the de-silting of two water pans, one at Suswa and the other at Narasha within the Lake Naivasha basin.

Each of the water pans is now a water reservoir with capacity to provide water to more than 30,000 heads of cattle throughout the year.

Key among these challenges included, improvement of fisheries infrastructure at the fish landing beaches within the Lake Naivasha, reduction of forest destruction for wood fuel through promotion of bio-gas, de-silting of water pans for livestock watering,

Enhancement of vegetation cover through tree planting, promotion of soil and water conservation and promote education, awareness and training of



Livestock arriving at one of the de-silted water pans in Suswa, Naivasha

community members on sustainable management of natural resources.

Since December 2011 Imarisha Naivasha Board has supported twelve medium level projects within the six thematic areas, identified to be of high priority.

Imarisha Naivasha board has supported the de-silting of two water pans, one at Suswa and the other at Narasha within the Lake Naivasha basin.

Each of the water pans is now a water reservoir with capacity to provide water to more than 30,000 heads of cattle throughout the year.

De silting of Water Pans.

During the dry season, over 50,000 herds of livestock could not access water in Suswa and Narasha areas and travels for between 20 and 30 Kms to Lake Naivasha for water and pasture on the lake riparian land. This is now history thanks to Imarisha.

Access to water within a

short distance from the pastoralists' settlements has reduced the long distance trekking by the communities and their animals to Lake Naivasha for water and pasture.

Improved access to water for the livestock will enhance the quality of livestock health and products, especially live animals, hides, meat

and milk that are the primary tradable products. Higher quality livestock products will contribute to the higher prices and income for the communities.

The survival rates for the animals will be enhanced and the previous mass mortality of livestock during dry seasons will be overcome. This will also ensure improved livelihood opportunities for the communities whose socio-economic growth and development revolves around livestock keeping.

In addition, Imarisha Naivasha board plans to construct and/or de-silt more pans and create water reservoirs throughout the pastoralist community areas as a means of re-distributing the livestock over the range to avoid over concentration in a few localities and the related conflicts and ecological degradation as exhibited by loss of biodiversity, pasture, land fertility, soil



One of the community tree nurseries

erosion, siltation and sedimentation of water bodies. Loss of land potential consequently leads to increased poverty among the communities.

Planting Trees and bamboos.

The Lake Naivasha Basin covers an area of about 3,400 Km² extending to the Aberdare forest range and Kinangop plateau to the north, the Mau forest and Escapement to the west and the Eburru Hills to the Northeast.

The basin has undergone drastic environmental degradation associated with increased human population and unsustainable land use practices



School children planting trees within the lake Naivasha Basin

The resultant impact has been severe decline in water resources and depletion of vegetation cover.

In order to ensure that community livelihoods are secured and the environmental health of the basin ecosystem is enhanced, there is urgent need to increase the vegetation cover within the upper, middle and lower catchment areas.

Imarisha aims to improve forest and land cover through increased trees and bamboos planting in the Lake Naivasha basin. This strategy can only be achieved through massive tree planting in all appropriate locations throughout the basin.

Imarisha Naivasha Board has supported three Community Forest Associations – (Geta, North Kinangop and Kuburu CFAs), one Civil Society Organization (IBECA) and two Community Self-Help Groups (Limuru Ndumo and Vision) to plant 100,000 tree seedlings.

The two groups have also been supported to establish two tree nurseries with a capacity to generate over 50,000 seedlings each for planting within the Gatamaiyu and Ndabibi-Eburru areas.

More seedlings have been planted within the Geta, North –Kinangop/ Mutarakwa forests and South Kinangop forest of the Aberdare ridges, the Middle catchment around the Maraigushu and Gatamaiyu areas and the Eburru forest area on the south western side of the Lake basin.

Imarisha Naivasha Board has also supported one Water Resources Users Association (WRUA) –Mkungi – Kitiri WRUA to plant 2,500 bamboo seedlings along the upper Malewa river to enhance water and soil conservation.

In addition to conservation, tree planting has also turned into income generation for local community through procurement of seedlings and provision of labour. This will contribute to improved income generation and socio-economic benefits and products that support the community livelihoods and well being. The planted trees will increase vegetation cover and in the long term mitigation against climate change.

Imarisha Naivasha Board has also been utilizing the Tree planting program to promote education, awareness and training of communities on environmental conservation and management as an important strategy for sustainable development.

Over 100,000 tree seedlings have been planted in the basin through both enrichment and new plantations translating to rehabilitation and restoration of about 167 hectares of degraded land, including improved water and soil conservation.



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Water Management:

Discover Flower Farms' Huge Investments

The Kenya Flower Council organized a press tour to different flower growing regions in Kenya with a mission to discover efforts made by various flower farms to harvest and manage the available water resources. The journey started with Athi River region, Isinya at the P. J. Dave Flower farm.

Despite the numerous negative stories in press, the team was shocked by the huge investment the farm has done in water conservation. The farm engages in vigorous water harvesting where they have constructed two dams with a water holding capacity of approximately 50,000 cubic metres.

All the rain water harvested from the farms 45 hectares greenhouse roofs is directed to the dams and later used to irrigate over 80,000 trees. They also use the water to irrigate maize, Sugarcane and other food crops grown within farm.

According to Mr. Peter Kiarie, the Administration Manager, the dam water is also used to refill underground aquifers through seepage which eventually feed the farm's four bore holes whose water is used for irrigation in the greenhouses.

Due to the high levels of pH in the area, the farm employs reverse osmosis technology to purify the water before it's fed to the flowers.

The next visit was to the Mt. Kenya region where two KFC member farms Finlays Horticulture, Sirimon farm and Tambuzi Limited played hosts.

At Sirimon, the Regional General Manager Mr. Mick Bartlett gave a highlight on the efforts made by Finlays farms in regard to water

management to ensure water sufficiency.

According to Mr. Bartlett, the farm invests approximately Kshs 22.5 million annually to manage its water and environment projects.

The farm harvests all the rainwater from the greenhouses and directs it to four large reservoirs with a total holding capacity of 634,000 cubic metres.

This water is adequate to irrigate the farm for four months. At Tambuzi, the Human Resource, Internal Auditor and Environment Manager Mrs. Christine Shikuku said the farm draws its water from River through a self-regulating ware.

The technology regulates the water flowing to the reservoir through a trench with a slanting gradient that ensures water flows to the reservoir only when it reaches a certain level. This ensures that the farm does not draw water when the river goes below certain predetermined levels.

The river cuts through the farm and the harvested water is directed to a 100,000 cubic metres reservoir. The farm has also drilled a borehole as an alternative source of water during dry spells. Next was Naivasha region, Ol Njorowa Farm where every drop of rain is harvested and stored in 5 reservoirs.

This water is collected from the roofs of the farms 20 hectares greenhouses. The water is sufficient to irrigate the farm for four weeks without requiring any other source of water. And to boost the reservoirs, the farm has sunk two bore holes to serve the farm during dry spells.

According to Mr. David Mousley, every drop of water is vital. He challenged the Government and Non-governmental Organizations to help farmers build capacity to harvest rain water.

Finally, the tour ended at Sian Agriflora in Njoro, Nakuru. The Farm Manager Mr. Laban Koima gave us a tour round the farm's where we found two water reservoirs with a holding capacity of 140,000 cubic metres.

Their water is collected from the roof of its greenhouses. When full, the water is sufficient to irrigate the farm for six months. The farm which grows roses and calla lilies on 28.5 hectares of land, has also drilled 5 bore holes to supplement the rain water.

Some of the farms have invested in wetlands to tackle waste water from greenhouses and pack-houses. The water is recycled and then used to irrigate other crops and trees around the farms.

They also have tree planting programmes as a way of conserving environment and mitigating negative climate change effects. At P. J. Dave for instance, the farm takes care of over 80,000 trees in the farm. Similarly, Sirimon the farm has been planting a total of 250,000 trees annually for the past three years.

This is in addition to thousands of other trees planted in the farm. Tambuzi Ltd boasts of having planted more than 35,000 trees around the farm's 64 hectares. At Ol Njorowa, the farm has planted thousands of indigenous trees in the farm while Sian-Agriflora Kenya Limited has planted more than 10,000 trees in its farm.

Make Employees Better at Their Jobs

Of course there is no reason to give employees a voice if you aren't willing to listen, so if you decide to try something like "CEO For a Day" (and why wouldn't you?), respond.

You've been there. You've stared at a blank document as you struggled to come up with incredible words of wisdom that will inspire and motivate your employees.

So has your neighbour, CEO of a fast growing ornamental growing company, which has over three farms nationally is one of the largest in the world. "I was sitting in front of my computer, trying to come up with something I could tell all these smart people in my company that would help them do their job better," He says, "and I realized that what I really should be doing is asking them what I should do."

Make them CEO

The ground rules were simple: Yesterday you were a regional manager. Today you're the CEO. What would you do to make the company better? He says many of the answers related to the person's job, but some related to broader issues.

And regardless of the answer, employees were able to indirectly express their emotions out without offending anyone. "Overall I loved the feedback," He says, "but it was also depressing because a number of people said, 'I would do whatever I could to bring back the family atmosphere we used to have in the company.'

Those responses made me feel like such a fraud. Every day I was talking about how our business is a family and about really knowing our employees.... and that's not how employees in the field felt.

"We have farms in three different locations and people across the country," he continued. "It was hard for all of our employees to feel like they are part of the family. I hadn't recognized that.

I still saw us as a mom and pop, but they saw us as a giant bureaucratic company. So I immediately changed my mind set from growing the company to fixing who we are." Keep in mind He is used to listening to employees.

His parents started the company, and they put him through a rigorous training process that required him to work in more than 10 positions throughout the company—from customer service to sales to propagation and production, spraying and scouting, harvesting and post harvest

handling, delivery truck driver to accounting.

"Everyone asks me if that was hard," he says. "I thought it was easy. I didn't have anything to hide and treated the task at hand as the task at hand instead of dwelling on what I would do next. I just stepped into every job and worked hard.

I learned a lot, but I also earned the respect of our employees... something I didn't realize I was doing until it was done." At age 30, He took over the company reins from his father. Since then revenue has grown 239%.

Get Rid of What Makes Them Unhappy

"By getting to know our employees and their jobs," He says, "I could eliminate things that made them unhappy and kept them from doing a better job. Sometimes it's not spreadsheets—it's company morale."

Feedback also convinced him to open satellite departments so the company could recruit better talent. "Most of our new hires were commuting from up to an hour a day," he says.

"To have someone outside my normal circle tell me we needed to go where the talent is was huge."

Of course there is no reason to give employees a voice if you aren't willing to listen, so if you decide to try something like "CEO For a Day" (and why wouldn't you?), respond.

Tell each employee what you think about their ideas and input. Be as open and honest as possible. Provide a thoughtful response: yes or no, and most importantly why.

"My secret to success is to be the same person at work that you are when you're having a great day with your best friend," He says. "You listen to your friends, right? So listen to your employees.

"Then just be that person, each and every day. If you are brave, honest, forthcoming, and transparent you don't have to try to be a leader. You can be yourself."

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Ethiopian Flower Exporters Considering Russian Market

Ethiopian flower exporters are considering entering the Russian flower market directly. Exporters have not been able to access the large Russian market because Ethiopian Airlines does not offer flights to Moscow according to sources.

Ethiopian Airlines, the Ministry of Transport, the Ministry of Foreign Affairs, and Ethiopian Airlines are working to facilitate the processes to launch cargo flights to Moscow said Endashaw Yigezu, Head of Air Transport and Planning at a consultative meeting held by the Ethiopian Civil Aviation Authority.

A challenge encountered has been that airports in Russia are owned by private investors and charge high landing fees explained Endeshaw. The airport fees are 30% higher than other European airports demand, which is more than the price of the flowers he added.

Ethiopian Airlines, however expects to finalize processes to commence flights in view of the market potential of the Russian flower market explained a source. It is to be remembered that Ethiopian government and the former USSR had signed Bilateral Air Services in 1977 and will hence require further agreement with Russia.

Floraholland Works On Improving Tenability Roses

The Dutch flower auction FloraHolland wants to improve the tenability roses and the sensitivity of the flower to botrytis. To achieve this, the auction wants to develop a number of checking, indication and analysis techniques.

The auction calls on growers to take part in vase life tests. With the results, the auction wants to get more information about the causes of tenability problems. These must help to find solutions.

The research is part of the Market Plan Roses of FloraHolland, which involves the whole chain of the rose production and must lead to a better market position.

The Euro Crisis Effect On the Flower Industry

Europe remains Kenya's biggest trading partner and a source of financing. The current financial volatility in the Eurozone could pose significant challenges for Kenya's exports and investments. For the flower industry the impact has been felt through the weakening of the euro against Kenya shilling and other major currencies. This is due to the fact that flower sales are mainly in the euro. Surprisingly, demand for flowers seems not to be affected by the raging euro crisis.

The weakening of the Euro against the US\$ and KShs has resulted in a reduced value of turnover valued in KshS. More importantly, wages which is a significant portion of cost is paid in Kshs. Falling value of the Euro to the Kshs therefore devalues returns substantially. To address the situation, growers are closely watching their costs, for example by not hiring new employees and not replacing those who have resigned voluntarily.

Currently there is less expansions happening in the farms. Others are trying to keep a market balance by increasing their sales to direct market with fixed quantity and price year round and less to the auctions. On the other hand, others have increased their export per square metre and also hedged on the exchange rates. If this continues, they may be forced to lay off workers.

Power Cuts Threaten Viability of Flower Growers

The president of The Zimbabwe Flower Growers Association, Pardon Muusha, said that in some areas farmers were getting only two hours of power, despite ZESA's promises to ensure 21 hours to the sector that depends on electricity to power irrigation pumps. "Flowers have not been irrigated for a month in the main flower producing areas in Vumba as ZESA has let us down badly. Production has plummeted and we have been unable to meet our export orders," he said.

"The viability of flower growers has been seriously threatened and the biggest challenge is remaining in this industry," he added. ZESA's inability over the years to boost generation capacity at its ageing power stations and the money to import adequate electricity from neighbouring countries has left Zimbabwe grappling with severe power shortages. Commercial consumers have to endure long periods without electricity, which analysts say is crippling efforts to revive the economy.

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Elgon Kenya is a leading manufacturer of packaging materials, distributor of agrochemical and fertilisers. We are pioneers in the industry in Kenya, Uganda, Tanzania and Ethiopia. We serve this zone with a strong, motivated, technical and experienced sales team which is committed towards a better service to our customers and the consumers

Elgon Kenya Limited is the 2012 Environmental Respect Award winner. Sponsored by international organizations, DuPont Crop Protection, Farm Chemicals International and CropLife magazine, the Environmental Respect Awards is a continuing effort to honour farm supply businesses that preserve and protect the environment in the course of their service to farmers with nutrients, pest control and agronomic information critical to effective crop production.

The program seeks to recognize good stewards, encourage stewardship among other agri-businesses, and disseminate information that provides managers with ideas on improving operations.

This year's winners were chosen from 65 entries from more than 20 countries, with representatives from only two African countries to having won the award, the other being an agent from Algeria.

In order to compete, retailers and distributors complete an extensive self-evaluation, detailing their emergency procedures, stewardship efforts and local educational endeavours.

The Environmental Respect Awards are the agricultural industry's highest recognition for environmental stewardship among global agricultural retailers and distributors.

Said Thomas Reitz, DuPont Representative for East and West Africa, "Elgon Kenya has gone beyond fashion to walk the talk by investing thousands of dollars in new facilities, new equipment and better training designed to protect the environment while better serving farmers". He added, "I sincerely want to thank

Elgon for their commitment to agriculture in Kenya, making sure that the products they handle are safe and effective, that their storage and distribution processes are environmentally sound, and that they pass on these concepts of good stewardship to their customers, the farmers.

Those are the elements that make this business one of the top environmental stewards in the nation." Elgon Kenya's Mr Nishal Sodha travelled to US to receive the Award on behalf of the company.

The objective of the award is to recognize efforts at environmental conservation against the backdrop of an increasing shortage of water and land amidst a ballooning world population and fears over the earth's ability to feed the current 7 billion people, a number that is expected to hit 9 billion by 2050.

"At Elgon Kenya we are proud to be associated with DuPont Crop Protection who are at the forefront of research that will make the above goals", said Nelson Maina, the company's communications manager, adding, "we too are committed to bringing the very best of technologies to our customers in Kenya, Uganda, Tanzania, Rwanda and Ethiopia".

About Elgon Kenya

Elgon Kenya is a leading manufacturer of packaging materials, distributor of agrochemical and fertilisers. We are pioneers in the industry in Kenya, Uganda, Tanzania and Ethiopia. We serve this zone with a strong, motivated, technical and experienced sales team which is committed towards a better service to our customers and the consumers. Our core values of commitment to quality and better services make the group a name to reckon with in the region.

For further information contact; Nelson Maina, Communications Manager, Elgon Kenya Limited, Tel:0722403103, email;nelsomaina@elgonkenya.com



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New From Bayer CropScience



INFINITO

The ultimate rose protection

A New Mode Of Action For Downy Mildew Control

Innovative Chemistry

INFINITO is a new-generation fungicide combining the innovative active ingredient *fluopicolide* with the established power of *propamocarb*. The two active ingredients compliment and support to deliver the ultimate flower protection. Representing a new chemical class, the *acylpicolides*, *fluopicolide* introduces a completely new mode of action. Its unique characteristics work in synergy with the proven capabilities of *propamocarb-HCl*, a *carbamate*, to set new standards in performance against the *oomycete* pathogen *Peronospora sparsa*. The result is a fast-acting, long-lasting product, active against all key stages in the pathogen's life cycle to provide outstanding defense throughout the crop cycle.

New Mode of Action

Fluopicolide works by disrupting the formation of spectrin-like proteins that play a vital role in maintaining the pathogen's cytoskeleton stability.

Built-in Resistance Management

Combining the complimentary modes of action of two active ingredients, **INFINITO** provides growers with a powerful new tool to counter resistance development. Their different modes of action bolster the product with a solid inbuilt anti-resistance mechanism.

Application rate

1.2- 1.5 litres per hectare

Perfect Coverage

INFINITO formulation technology produces complete and even distribution of the product on leaves, stems, and petioles. Small droplets with excellent sticking properties cover the upper and lower surfaces of the leaf, un-hindered by leaf hairs. After drying, *fluopicolide* particles are evenly distributed to provide complete protection against the pathogen.

Fast Uptake

Full protection is achieved on the day of application, through its contact and systemic action. The *propamocarb* moves quickly into the leaves and stems taking some of the *fluopicolide* dissolved in the spray solution with it.

Long Lasting

The even distribution of *fluopicolide* particles provides a reservoir of product to protect the leaf surface against further infection. *Fluopicolide* persistent uptake into the leaf and stems throughout the spray interval maintains a high level of protection. *Fluopicolide* has strong translaminar absorption.

Weather Independent

INFINITO adheres firmly to the leaf even when the surface is wet with dew or recent spray. Once dried on the leaf, the product remains fixed and resists wash-off by follow-up sprays.

Conclusion

INFINITO provides the robust foliar protection and strong anti-sporulant activity. In addition, it brings all the performance features needed to deliver the ultimate flower protection:

- Leaf and stem protection
- Strong translaminar and anti-sporulant activity
- Activity at every key stage in the pathogen's life cycle
- Fast and long lasting action
- Effective under all weather conditions
- Built-in resistance management
- Favourable environmental and toxicological profile
- Excellent crop safety
- Low dose rate
- Easy to use liquid formulation



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ARE YOUR EMPLOYEES READY FOR RETIREMENT?

By Alex K. Mutungi

Eighteen years ago when I had just been employed we were summoned on a Friday evening for a meeting to bid farewell to a retiring colleague. At the brief meeting the colleague was handed a plough, as a retirement gift, and given an opportunity to give his speech. What stuck with me to this very day was his request for one more year in employment to put up a house up country.

Surprising even as I pen this article cases of retirement unpreparedness in our society abound. But how did we get to this point? From time immemorial the African society had its own mechanisms of taking care of the old. The needs of the elderly were the responsibility of the younger generation and neglecting the former would have resulted in a curse. However, with the atomization of the family unit and rural-urban migration the old system is no longer tenable. In fact a number of retirees are shouldering the costs of bring up their grand children. The situation need not be this bleak since there are many vehicles for planning for retirement, one of which is a retirement benefits scheme.

RETIREMENT BENEFITS SCHEME

Retirement Benefits Scheme is a term that is generally used to refer to an arrangement that is set up with the objective of paying a benefit to a member at the end of his working life or his dependants in case of an earlier death.

BENEFITS OF SETTING UP A RETIREMENT BENEFITS SCHEME

Employer

For the employer it:-

- is a tool to attract, retain and motivate employees
- Enables them to provide for the dependants of their employees in the event of demise
- Allows them to save on taxes
- Ensures that the employees are

able to maintain more or less the same living standards after retirement.

Employee

For the employee it:-

- Is a vehicle for accumulating savings
- Enables them to provide for the dependants in the event of demise prior to retirement
- Allows them to save on taxes
- Provides income when they are no longer able to secure employment

Due to disability or old age Where an employer decides to set up a retirement benefits scheme particular choices will have to be made.

Will the scheme be:-

- Group or Individual?
- Pension or Provident Fund?
- Defined Benefits or Defined Contribution?
- Segregated or Guaranteed?

Group Versus Individual

Whereas employers have an option of setting up a group scheme for the staff, most employers with less than 100 employees prefer individual retirement plans for the following reasons:-

- Portability – the plans can be moved from provider to another
- Flexibility – the member selects the mode of contribution and gaps in contributions are not penalized.
- No administrative work on employers
- No legal implications for employers
- Additional benefits – covers such as funeral expense, disability and critical illness can be plugged in
- Guaranteed principal and minimum interest
- Simple entry procedures

PENSION VERSUS PROVIDENT

In terms of nature of benefit, retirement benefits schemes are classified into pension schemes and provident funds. A pension scheme is a retirement benefits arrangement that pays out a

regular income at the end one working life. However, a member has an option of converting up to one third of the pension to lump sum. A provident fund pays out a lump sum amount at a member's retirement or earlier death. Upon receipt of the payout a member could still purchase an annuity and as such provident funds provide more flexibility.

DEFINED BENEFITS VERSUS DEFINED CONTRIBUTION

A scheme could also be a Defined Benefits Scheme where the benefit at retirement is based on a formula that takes into account the member's years of service, salary and pension factor. The contrast to this is a Defined Contribution Scheme where the benefits are a function of contributions made by the member or employer or both, and the interest earned by the contributions during the member's working life.

Segregated Versus Guaranteed Funds

With regard to investment vehicles funds can be segregated or pooled under guaranteed funds. Guaranteed Pooled Funds are ideal for individuals, small schemes and start up funds. Funds from different small pension schemes are put in one large fund that enables small schemes to enjoy economies of scale. Segregated Funds are ideal for schemes which are big enough to enable investment diversification and negotiation of favorable investment terms. Well there you have it! Employers can facilitate a comfortable retirement for their employees and the later should make it a personal responsibility to ensure that their retirement income is adequate.

Alex K. Mutungi is the Managing Director Apex Pension Limited. apexpensionlimited@gmail.com

Why companies can no longer afford to ignore their social responsibilities

In 1970, the economist and Nobel laureate Milton Friedman published an article in The New York Times Magazine titled, "The Social Responsibility of Business Is to Increase Its Profits." In the article, he referred to corporate social responsibility (CSR) programs as "hypocritical window-dressing," and said that businesspeople inclined toward such programs "reveal a suicidal impulse." Even four decades ago, at a time of growing public concern for the environment, his views represented the general skepticism and contempt with which many in Corporate viewed CSR.

Times have changed. There remain company chieftains who take a Friedman-esque view, of course, but many more have made CSR a priority. Ten years ago, for instance, only about a dozen Fortune 500 companies issued a CSR or sustainability report.

Now the majority does. More than 8,000 businesses around the world have signed the UN Global Compact pledging to show good global citizenship in the areas of human rights, labor standards and environmental protection. The next generation of business leaders is even more likely to prioritize CSR. According to data available, the nonprofit that aims to help businesses promote sustainability, 65% of MBAs surveyed say they want to make a social or environmental difference through their jobs.

Today, amid a lingering recession that has dented corporate profits and intensified pressure from shareholders, companies are devising new CSR models. Rather than staffing a modest CSR department — and slapping it on the org chart as a small offshoot of the public relations (PR) or philanthropy division — many companies are instead trying to embed CSR into their operations. Some companies are creating new markets in the developing world by closely aligning social causes with

their overarching corporate strategies. Others, have made ambitious commitments to sustainability as a way to save money and tighten their supply chain. "CSR is an old-fashioned idea that needs to be upgraded," says Eric Orts, professor of legal studies and business ethics at Wharton and director of the school's Initiative for Global Environmental Leadership. "For companies to take CSR seriously, it has to be integrated into the DNA of the enterprise. Companies need to say: 'We want to make money, sure, but we also care about our effect on society and the environment. And that comes through in the kinds of jobs we provide, the kinds of products we make and the ways in which we use resources.'"

Ignore CSR at Your Peril

One of the biggest criticisms levelled against CSR is that companies only care about it for marketing purposes. CSR is merely a buzzword embraced by corporations because they "should." "For most companies, [CSR] is PR," according to Ian C. MacMillan, professor of innovation and entrepreneurship at Wharton. "It looks good. It sounds good. It's the 'right' thing to do — and it gets the media out of their face."

These days, corporate motivation seems almost beside the point because of the significant business risks to ignoring CSR. Consumers and other companies are likely to shun firms that develop unethical reputations. And arguably, companies that don't pay attention to their ethical responsibilities are more likely to stumble into legal troubles, such as mass corruption or accounting fraud scandals.

Quite simply, companies care about CSR because their customers do. Consumers, by and large, are a self-motivated and self-interested lot. But numerous studies indicate that

a company's CSR policies increasingly factor into their decisions. For example, a recent survey a branding company, found that 77% of consumers say it is important for companies to be socially responsible. There's a heightened awareness of the need to be, and to be seen as, a good corporate citizen, which helps consumers direct a percentage of their purchases to support charities.

And in the Electronic Age, where information about a given company's environmental record and labor practices is readily available — and readily tweeted and re-tweeted — companies must pay careful attention to what their customers do and say. In the Information Age, customers have more access to information handler. They're more educated. They're no longer hidden from how their food is produced or how their iPods are made. And, because of things like social media, like-minded people more easily find each other, have their say and effect change. There's a level of transparency that wasn't there before."

CSR is also a way to attract and retain talent. In a global workforce study by a professional services firm, CSR is the third most important driver of employee engagement overall. For companies in the U.S., an organization's stature in the community is the second most important driver of employee engagement, and a company's reputation for social responsibility is also among the top 10. According to the survey, a company's commitment to the community has an influence on their decision to work there.

"The Millennial generation has seen a lot of natural disasters, political disasters and corporate disasters. They think the world is screwed up. They feel personally responsible, and they feel empowered to create change.

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Mode of action

Movento OD 150 is a lipid biosynthesis inhibitor that acts on the juvenile stages of insects causing incomplete moulting. Treated female aphid and whitefly adults often deposit only non-viable nymphs and eggs and show a marked reduction in fecundity and fertility, hence reducing insect populations. It addresses a completely new target site never exploited by any other insecticide.

2-way systemicity: Up and down the plant

All commercially available systemic insecticides feature one-way systemicity, i.e. after leaf uptake, they are mainly translocated in the plant's xylem where water and nutrients are passively transported upwards by the transpiration pull of the leaf stomata. Movento®'s unique physico-chemical properties, however, allow it to be translocated in the plant's phloem, which mainly transports sucrose and other organic compounds upwards and downwards, i.e. two-way systemicity.

After foliar application, Movento® is translocated along in leaf cells via the phloem of the smallest veins to other parts of the plant such as developing leaves, buds, fruits and roots

Formulation

Movento OD 150 is formulated using Bayer's new oil based solvent free O-TEQ innovation. This formulation ensures optimal uptake and retention of the active ingredients by the leaf resulting in enhanced efficacy.

Application

Movento® OD 150 is applied as a foliar spray treatment using various water volumes, depending on the crop and foliage height/density, to ensure that all aerial parts of the crop are well covered.

Reliable partner for resistance management

The fact that Movento® belongs to a completely new chemical class of insecticides means cross-resistance to other insecticides is unlikely. In order to sustain its long-term efficacy Movento® should be used according to the manufacturer's recommendations.

MOVENTO® is a registered trademark of Bayer Group

For more information contact:

Bayer East Africa Limited,

Thika Road/ Outer ring Road, Ruaraka

P.O. Box 30321, 00100 GPO Nairobi, Kenya.

Tel: +254 20 8600000 Fax: +254 20 8600010

Email: info.ke@bayer.com, bcs.ke@bayer.com, www.bayercropscience.com

MOVENTO®

2xSYS

2-way systemic pest control: Putting an end to hide-and-seek

Benefits

- New chemistry with a completely new mode of action
- No cross resistance with existing chemistry
- Broad spectrum efficacy on sucking pests
- Long lasting control
- Compatibility with Biological Control Agents
- Protection of newly grown parts of plants (shoots and roots)
- Translocation to most of the difficult to reach parts of plants
- Improved control of hidden pests

The Things Customers Can Do Better Than You

Many firms assume that customers can do just one thing of real significance: buy their products and services. It's time to seriously challenge that assumption, as many companies are doing by looking to customers to fuel their growth engines.

Facebook, for example, has close to 1 billion customers who don't pay a cent. Yet the company is receiving valuations of \$50 billion and more — despite having just 3,000 or so employees — because of the extremely high-potential, non-purchasing value such customers provide. In a phrase, Facebook and other forward-thinking companies look to their customers to grow their businesses.

This isn't genius at work. In fact, more entrepreneurs are simply recognizing — and acting upon — entirely obvious realities about customers and their desires and competencies, choosing to leverage these rather than fight against them, as so many firms do.

Here are five examples:

Customers know more about each other than you know about them. That's the source of much of the stratospheric value placed on Facebook by investors. Imagine a traditional company that tried to generate the kind of information Facebook generates: real time data on what movies people are watching, where they travel, the books they're reading, the restaurants they've tried.

Facebook dispensed with all the research most companies would have tried to dig up, and instead focused on letting customers provide it. Companies must realize that customers are interested in

how they and the markets they serviced stacked up to other firms and markets. Customers are more credible than you are. That means they make better marketers for a firm than agencies or internal employees.

Most companies have a serious customer retention issue — retention rates keep on declining and numbers continue to drop. It is terribly frustrating to firm executives, because they keep on doing an excellent job to keep up with customer needs.

The problem is, customers don't realize this. This is the high time companies realize that it would be futile to keep trying to point this out, and instead built a team of customer "champions" to do so. With support from the management, the customer champions must establish regular events in customer catchment areas, set the agendas, select speakers (and made presentations, themselves) and stayed in touch afterwards in online forums and through e-newsletters.

Result: retention rates will bounce back up to the high 90s. Customers are more persuasive than you are. That means they make better sales people. Companies which realize this in the early days of building Sales force team benefit. No need of multi-million dollar budgets of in marketing instead rely on face-to-face meetings with prospects and customers.

It may not come as a surprise that, prospects at such events will be more interested in talking with customers than with their sales team, and to the company's delight 80% of prospects who attend the events end up becoming

customers themselves — an amazing close rate for any offering. And unlike sales team, customer sales people didn't require a bit of training. Customers often understand buyer needs better than you do.

One of the great misconceptions still floating around is that customers can't articulate their needs, much less develop ideas for products to satisfy them. A substantial body of well-established research has shown that many if not most successful innovations are customer-originated.

In one compilation of studies of 1193 commercially successful innovations across nine industries by MIT's Eric von Hippel, 737 (60%) came from customers.

Companies who languish with poor success rates for their product development efforts should consider looking outside to customer innovators for this. Based on such researches, companies must kick-start their consistently poor innovation record through customer innovation. A team should be formed to bypass the internal innovation process and search for breakthrough innovations being created by outside "lead users."

When the results are compared with ordinary product development projects, the differences will be dramatic: Lead-user innovations achieve higher average revenue compared with internally generated innovations.

So the message is clear for years. The remaining big challenge is getting more and more companies to recognize this and to create

ways to capture this customer knowledge in their everyday operations. Prospects in your market would rather affiliate with their peers (your customers) than with you.

By nature, most all of us are open to creative new ways to affiliate with our friends and peers — the very foundation on which Facebook was originally built.

Companies are often uncertain about being able to create opportunities to affiliate that customers would embrace — but they can, as long as they avoid making the common mistake that customers want to affiliate with the company. They want to associate with their peers — meaning your customers, not you. Many companies spend billions to come up with TV ads and billboards to push their products to no success.

Thereafter they enlist "experts" to provide content, which do little to build interest. It is high time companies create forums (e.g Facebook sites) so that customers could talk to each other about the issues and challenges they are facing in their businesses.

And believe it the site will take off, with buyers from around the world eager to get into the conversation — and the company will be able to market its products more subtly and effectively than before.

Customers are often more apt to trust and be interested in information if it comes from a peer, rather than a company.

So remember, there are many things your customers can do better than you. How are you involving your customers to help grow your business?.



What is Megaprode 500SC?

Megaprode® 500 SC is a contact protective and curative fungicide containing Iprodione 500g/l for control of fungal diseases in wide range of crops as Roses, Carnation, cereals, fruit trees, berry fruit, rice, vegetables as a foliar spray.

Megaprode 500SC fungicide provides unmatched tremendous value in the fight against foliar and soil-borne diseases in commercial greenhouses and nurseries, landscaping and forestry. It prevents key leaf spot diseases: Botrytis, Cylindrocladium blight and wilt, and Rhizoctonia stem and root rot. When used as directed, Megaprode 500SC:

Advantages of Megaprode

- Provides cost-effective disease control with Iprodione, a proven active ingredient for ornamentals.
- Has shown excellent crop safety on most ornamentals
- Controls key foliar and soil-borne ornamental diseases, including leaf spots, Botrytis blight and Rhizoctonia stem and root rot.

Diseases Controlled

- Aerial Web Blight - Rhizoctonia spp.
- Alternaria Leaf Blight - Alternaria euphorbiae
- Botrytis Blight - Botrytis spp.
- Cylindrocladium Blight and Wilt - Cylindrocladium scoparium
- Fusarium Leaf Spot - Fusarium moniliforme
- Helminthosporium Leaf Spot - Helminthosporium spp.
- Rhizoctonia Stem and Root Rot - Rhizoctonia spp.
- Rots - Botrytis spp., Fusarium oxysporum

Insist on Megaprode. For a Better Value

info@greenlife.co.ke | www.greenlife.co.ke

Megaprode
Iprodione 500 SC

Greenlife
Agrosience (EA) Ltd,
Value added modern farming

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Use Rates:

Crop	Disease	Rate	Application interval
Ornamentals	Grey mould (Botrytis cinerea)	50-100ml per 100L of water	7-14 days

Signal Word: CAUTION. REI: once pesticide spray has dried

Mode of Action:
Contact fungicide with protective and curative action. Inhibits germination of spores and growth of fungal mycelium – thus affecting cell division, DNA and RNA synthesis and metabolism.

Behavior in Plant: Acts as a local penetrant.

Keys to Success
Apply foliar spray solution to runoff. Preventive or early curative applications are most effective. Do not prepare more solution than can be used within 12 hours. A spreader sticker is included in the formulation. Application of Megaprode 500SC at higher rates and shorter intervals are appropriate for all diseases when conditions are severe. Applications of lower rates and longer intervals are suggested for times when disease pressure is light to moderate.

Crop Phytotoxicity
Megaprode 500SC has shown excellent crop safety in a number of research trials. Users should conduct small-scale tests under local growing conditions prior to wide-scale use.

Formulation: 500 SC
Packaging: 1L
Active Ingredient: Iprodione
Chemical Family: Dicarboxamide

P.O. Box 24942 - 00100, Nairobi, Kenya, Off Mombasa Rd. Behind Ken Tech, City cabanas
Tel: +254 20 2128459, Fax: +254 20 2699191 | Mob: +254 722 736318, +254 735 544544

Laboratory Tests For Raising Flower Quality



Whereas many farms send samples abroad for these tests, local capacity is rapidly catching up.

Background

Laboratory tests in Floriculture are crucial for various reasons which include regulatory, agronomic and engineering. Regulatory tests are often mandatory so that many farms are obliged to undertake them.

Most flower farms are high investment ventures with specialized engineering works involving greenhouses and irrigation systems.

These often require tests e.g. water to avoid corrosion, air quality etc. Agronomic tests involve soil, drip water (substrate), drain water, leaf tissue analyses, diagnosis of plant parasitic nematodes, as well as pest and diseases.

This text will dwell on the importance of agronomic tests in improving flower quality. Agronomic tests are often overshadowed by regulatory (and even engineering) tests yet they have more direct bearing on the quality of flowers. The reason for this apparent inattention is cost implication. Consequently, farms wait until problems are “visible” by which time the issue has become irreversible. Critical cost-benefit analyses of carrying out routine agronomic tests have demonstrated their importance.

Indeed, developed Floriculture systems put these tests high in their priority lists and never engage in “trial and error” farming. Smart agronomists insist on prevention or at least timely intervention before symptoms come to the fore. This is only possible through routine tests

to monitor threshold levels.

Soil Tests

A number of flower farms rely on soil as growth media, therefore it is imperative to analyze it to know its reaction and nutritional status. Soil reaction refers to soil pH, salinity and sodicity (sodium hazard as measured using sodium adsorption ratio-SAR).

Soil nutritional status is determined with reference to optimal levels of plant nutrients and this can be crop specific. It is a safeguard against malnutrition that leads to deficiencies and toxicities. For example, Phosphorus toxicity is a common problem when it accumulates in clay soils.

Phosphorus and potassium toxicity shows similar symptoms to deficiencies of copper, iron and zinc. The main symptom is leaf chlorosis with ribs remaining green, but potassium toxicity also causes root loss and hence wilting of new shoots. Excess phosphorus and potassium hinders availability of the three elements.

Routine measurements ensures the ranges of the parameters are maintained. Preferable frequency for roses is quarterly but often the period prior to Valentine is included because it sometimes account for 50% of annual production for many farms.

In order for soil test results to be representative, it is important that sampling is done correctly. Soil samples

from distinctly different greenhouses should not be mixed. Several sub-samples should be collected in a plastic container where they are thoroughly mixed before a sample is drawn. This should be well labeled before being submitted to a laboratory for analysis. Such a protocol avoids erroneous fertilizer programmes that can lead to losses.

Analysis of Drip Water

Majority of flower farms in Kenya use fertigation as means of irrigation and fertilizer application. Consequently, it is important to first determine irrigation water quality particularly for farms that do not practice reverse osmosis. The variables of irrigation water are first determined so that addition of soluble fertilizers will factor in the contents of the water.

The main parameters are pH, EC, SAR, chloride and bicarbonate levels in addition to concentration of plant nutrients especially nitrates and phosphates. Many farms are well equipped to handle pH and EC, however, they need the services of analytical laboratories from time to time to determine the other attributes and make the necessary adjustments.

Unsuitable irrigation water may cause hazards such as scorching crops, toxicity, corrosion of irrigation equipment, and may lead to surface crusting of soils thus impeding water permeability. Farms that recycle drain water need to have it



analyzed to restore its balance as well as avoid recycling pathogens.

Pathological tests

Pathological tests are used to diagnose disease causing pathogens mainly plant parasitic fungi and bacteria. Diagnosis is achieved using signs and symptoms as well as culturing in a microbiology laboratory followed by observation under microscope.

Nematode Genera	Threshold Number
Root-Knot (<i>Meloidogyne</i> spp)	1000/kg soil
Lesion (<i>Pratylenchus</i> spp)	1000/kg soil; 50/g of dry root
Dagger (<i>Xiphinema</i> spp)	100/kg soil
Sting (<i>Belonolaimus</i> spp)	100/kg soil
Pin (<i>Paratylenchus</i> spp)	5000/kg soil
Stubby root (<i>Trichodorus</i> spp)	500/kg soil

However, this is giving way to the fast and accurate DNA based scanning using packages like Diagnoster and Riscover Soil, roots and leaves are often sampled for extraction of plant parasitic nematodes for identification, counting and diagnosis of nematode disease which help to make sound management decisions that significantly add value for producers.

The main nematodes and their threshold

numbers that cause economic damage on most flower crops are illustrated in the table below.

Leaf tissue analysis

Leaf tissue analysis is one of the least regarded parameter yet potentially the most profitable. It is a measure of nutrient levels in plant and is a reflection of available nutrients.

Leaf analysis can be used to determine whether the right fertilizers were used, it is also used to diagnose nutrition problems like “hidden hunger”. The latter is a condition where a plant shows no obvious symptoms, yet the nutrient content is not sufficient to give optimum yield. Leaf tissue analysis helps to programme fertilization with rate for production instead of mere survival leading to optimum yields.

It is important to sample leaves correctly otherwise the findings can be misleading and end up with wrong fertilization program.

For instance, rose should be sampled at bloom where 25-30 recently mature compound leaves are taken from a flowering stem. Failure to observe this bit of the protocol can lead to a serious error leading to wrong fertilization.

Conclusion

Laboratory tests in Floriculture are crucial, but need to be implemented with a high level of precision. Flower farms have consultants who help to monitor and take preventive, curative and corrective measures. Some laboratories add value to their tests by including advice that is crop specific, thus helping to complement the work of consultants.

Optimum ranges of soil reaction parameters and nutrients for roses

Parameter	pH	EC mS/CM	SAR	Macronutrients: Parts Per Million (ppm)						Trace elements: Parts Per Million (ppm)						
				K ⁺	Ca ²⁺	Mg ²⁺	NO ₃ ⁻	SO ₄ ²⁻	H ₂ PO ₄ ⁻	Fe	Mn	Zn	B	Cu	Mo	
Low	6.0	0.5		50	40	20	155	16	15		0.3	0.2	0.03	0.1	0.001	0.01
High	7.5	2	12	300	200	100	664	28	153		3	3	3	0.75	0.5	0.1

Parameter	Macro-elements: Percent (%)						Trace elements: Parts per million				
	N	P	K ⁺	Ca ²⁺	Mg ²⁺	S	Fe	Zn	Cu	Mn	B
Low	3	0.2	2	1	0.25		50	15	5	30	30
High	5	0.3	3	1.5	0.35		150	50	15	250	60

An edited version of an earlier submitted article, Photos and charts by a leading Laboratory testing Company.

Savanah plants	Naivasha	Geraniums	lukulu
Shade Horticulture	Isinya	Roses	Mr. Mishra Ashutosh
Schreurs (Linsen)	Naivasha	Roses	Mr. Pius Osore
Shalimar Farm	Naivasha	Roses	Mr. Vijay Kumar
Sian Flowers- Agriflora	Nakuru	Roses/ Lilies	Mr. Laban koima
Sian Flowers -Equator	Eldoret	Roses	Mr. Nehemiah Kangogo
Sian Flowers- Maji Mazuri	Mois Bridge	Roses	Mr. Clement Ng'etich
Sian Winchester	Nairobi	Roses	Mr. R. Mulinge
Sierra roses		Roses	Mr. Mahesh
Simbi Roses Ltd.	Thika	Roses	Mr. Jefferson Karue
Sirgoek flowers	Eldoret	Roses	Mr. Andrew
Solo Plant (K) Ltd.	Kiambu	Roses	Mr. Haggai Horwitz
Stockman rozen	Naivasha	propagator	Mr. Julius Muchiri
Subati Ltd	Subukia	Roses	Mr. Naren/Ravi
Subati (former olij)	Naivasha	Roses	Mr. Patel
Suera Flowers	Nyahururu	Roses	Mr. Joseph Mureithi
Sunripe	Nanyuki	Vegetables	Mr. James Muhoho
Sunripe savanah	Naivasha	vegetables	Mr. George
Tamalu	Timau	zante	Mr. David N.
Tambuzi Flowers	Naromoru	Roses	
Terrasol	Limuru	Cuttings	Eva
Timaflor Ltd	Timau	Roses	Mr. Bryan Allen
Timau flair	Timau	Roses	Mr. Philip Ayiecha
Transebel Ltd.	Thika	Roses	Mr. David Muchiri
Tropiflora (K) Ltd.	Limuru	Carnations, Astroemeria	Mr. N.Krasensky
Tulaga	Naivasha	Roses	Mr. Denis Wedds
Uhuru Flowers	Kiambu	Roses	Mr. Ivan Freeman
Valentine Kibubuti	Naivasha	Roses	Susan Maina
Van den berg roses	Naromoru	Roses	Johan Remeus
Vegpro (k) Ltd - Kitawi	Nanyuki	Vegetables	Das
Vegpro (k) Ltd - Likii River	Timau	Roses	Mr. Madhav Patel
Vegpro (k) Ltd- Kongoni	Timau	Roses	Vivek Sharma
Waridi Ltd	Athi River	Roses	Mr. P.D. Kadlag
Wiham Veg Mwanzi	Nyahururu		Madadi
Wildfire flower com	Naivasha	Roses/Hypericum	Christine Karambu
Windsor Flowers	Thika	Rose	Mr. Pardeep
Xpression ltd -Africa Blooms	Salgaa	Roses	Mr. Samir
Xpression ltd -Elburgon	Nakuru		Mr. Inder
Zena roses - Asai	Eldoret	Roses	Mr. Lucas O.
Zena Roses	Thika	Roses	Mr. Peter Ochami
Zena Roses - Sosiani	Eldoret	Roses/Carnations	Mr. Fanuel O.

FLOWER FARMS IN ETHIOPIA

FARM NAME	CONTACT PERSON	PRODUCT	TELEPHONE
A" flower	Rashid Mohammed	Roses	+251 11 553 3237
Abyssinia flowers		Roses	+251 11 554 0368
Agri flora plc		Roses	+251 11 237 2325
Alliance flowers plc	Ravi	Roses	+251 116184341/ 2849329/30
Almeta impex plc	Ato Yonas Alemu		+251 11 553 4222/24
Aq roses plc			+251 46 441 4277
Arsi agricultural	William Ngelechei/Tahir Aman	Roses	+251 11 442 3661 /
Mechanization service	Belay		+251 443 1946/49
Avon flowers plc.			+251 11552 8900
Awassa greenwoods plc			+251 552 8900 / 0462210045
Beauty green plc	Hypericums		+251 11 554 4601
Blen flowers plc	Yonas Tsegaye		
Blu nile flora plc	Anteneme Zenebe		
Chibo flowers	Ato habtamu gesesse		
Dandi bour floralia plc			
Dire highland Flower plc	Tesfaye Asegidew		+251 11 551 3525, 552 6310
Dream flowers plc	E.Ravi Chandran / Wycliffe Otieno	Roses	+251 11 618 4341
Dugda floriculture			+251 11 554 0509 , 550 1414
Dyr	Yosef Beyene	Carnations	+251113390251
Eden roses	Tshaye		+251 11 646 1443/5
Enyi ethio rose	Tewahido Haymanot/Teshalewolde	Roses	+251 11 348 1987, 348 2167
Eteco plc			
Et-highland flora plc	Tim Harrap / BrianSheepers	Roses	+251 11 466 0982

mishra@shadeshorticulture.com
info@linssenroses.co.ke
info@eaga.co.ke
lkoima@sianroses.co.ke
nehemiah@equator.sianroses.co.ke
cng'etich@sianroses.co.ke
rmulinge@sianroses.co.ke
kingi@sansora.co.ke
sirgoek@africaonline.co.ke
hagai@soloplant.co.ke
jlius@srk.co.ke
production@subatiflowers.com
production@subatiflowers.com
suerafarm@suerafarm.sgc.co.ke

nzomahd@gmail.com
info@tambuzi.co.ke
info@terrasol.com
brian.allen@timaflorltd.com

admin@transbel.co.ke
tropiflora@tropiflora.net
denis.weds@africaonline.co.ke
ivan@uhuruflowers.co.ke
info@valentineflora.com
johan@roseskenya.com

madhav@vegpro_group.com
vivek@vegpro_group.com
kadlag@waridifarm.com

christine.karambu@wildfire-flowers.

farm@windsor-flowers.com

lucasoongena@yahoo.com
productionthika@zenaroses.co.ke

E-MAIL

mekiya@ethionet.et
ggh_link@ethionet.et
flowers@ethionet.et
allianceflowers@yahoo.com
almeta.Impex@ethionet.et
ethiopia@aqroses.com
arsiflower@ethionet.et

Gomba@ethionet.et
awassagreenwood@ethionet.et
seidlert@ethionet.et
blenflowers@ethionet.et
bnf2etf@ethionet.et
expincor@ethionet.et
dbuc@ethionet.et
dhf@ethionet.et
dreamflowers@ethionet.et
dugdaagr@ethionet.et
dyr@ethionet.et
edenroseplc@ethionet.et
enyi@ethionet.et
eteco@ethionet.et
Bnf2etf@ethionet.et

Ethio agri-ceft
Ethio dream plc
Ethio flora plc
Ethiopian cuttings
Ethiopian magical farm
Ethioplant plc
Experience inc. Plc
Fiyori ethiopia plc
Florensis ethiopia plc
Golden rose agrofarm Ltd.
Herburg roses plc
Holeta rose plc
Ilan tot plc
JJ Kothari PLC
Joe flowers plc
Jordan river herbs plc
Joshua Flowers PLC
Joytech
Karuturi sai
Lafto Roses PLC
Langano Lily
Linssen roses
Lucy ethiopia flowers plc
Mam -Trading PLC

Maranque plants plc
Marginpar ethiopia pvt. Ltd. Co
Metrolux flowers
Meskel flowers
Minaye flowers plc.
Mullo farm plc
Noa flora plc
Oda flower plc
Omega farms plc
Olij Flowers PLC
Oromia wonders
Rainbow colours plc
Red fox ethiopia plc
"

Roman ayele
Rose ethiopia plc
Roshanara roses plc.
Sathya sai farms (e)ltd, plc
Saron rose agrofram plc
Sheba flowers plc
Siet agro plc
Soparasy (mekiya)
Spirit plc
Summit plc
Supra flowers plc
Tabor herbs
Tal flowers plc.
Top Flower PLC
Tinaw business s.c
Uni-flower plc
Johnsonflower farm.
Zaguwe flora plc
Zubka general business
Flower farm plc

Top flower plc
Valley farm plc
Yassin legesse johnson flower farm
Zaguwe Flower
Ziway roses plc
ZK Flower
Zubka General Business PLC

FLOWER FARMS IN ETHIOPIA

Arvind / Kebede / Biru abebe	Rose	+251 11 618 6483 , 662 53 27	agricft@ethionet.et
Bimal /Emmanuel	Roses	+251 11 618 9313/143	ethiodream@ethionet.et
		+251 11 466 0982	Bnf2etf@ethionet.et
	Geraniums	+251 11 661 45 11 , 662 46 55	ethiopiaccutting@ethionet.et
	Roses	+251 11 662 2570	emf@ethionet.et
		+251 11 387 1277	accounts@ethioplants.com
Felix Steeghs/ Kontos		+251 11 464 4137	expincor@ethionet.et
Telahum Makonnem	Roses	+251 11 663 6292	yoshe@ethionet.et
James Mwicigi	Cuttings	+251 11 652 5556 , 652 5557	flrensis@ethionet.et
Ronald Vijverberg	Roses	+251 11 466 9971	gomba@ethionet.et
Shahab Khan / Sunil Chaudari		+251 11 441 4279	herburgj@ethionet.et
Mr. Adrianus Gerardus		+251 11 618 4341	holroses@ethionet.et
Navale Bhausahab K.	Roses	+251 (011)656 90/2/3	ilan@ilantot.com
		+251 11 466 1155	jjkothari@ethionet.et
Ashok Bhujbal	Roses	+251 11 629 0800	jflowers@ethionet.et
	Roses	+251 11 663 6173 , 654 0207/9	flower_herb@yahoo.com
		+251 11 550 7656 /7	joshuaflowers@ethionet.et
		+251 11 662 0205 , 433 6123/5	arnon@joytechplc.com
Ramarkrishna Karuturi/Anil	Roses	+251 663 2437/9	ethmeadows@gmail.com
		+251 11 554 1485 , 554 1483	laforroses@ethionet.et
		+251 46 1191497	langanolilyflowers@gmail.com
Wim Linssen		+251 11 320 5668	linssenroseset@ethionet.et
Mussema Aman/Idris/ Absalom Orero	Roses	+251 11 4402080	ger@lucyflowers.com
		+251 22 119 0750	mamtrading@ethionet.et
			maranqueplants@hotmail.com
Peter Pardoen/Mwangi	Eryngiums, hypericums	+251 11 371 6232	marginpar@ethionet.et
Roy/Daniel	Roses	+251 11 466 9273	dgad@ethionet.et
Francis Muriuki	Roses		
Eyob Kebebe/MauriceOjow	Roses	+251 11 372 8666 /7/9	minaye@ethionet.et
		+251 11 554 0368	mullo@ethionet.et
		+251 11 618 6203	noaflora@gmail.com
Mr.David Klein			odaflowers@ethionet.et
Lemlem Sisay/Jackton Ogola Arek	Roses	+251 11 466 9273 /76	dgad@comcast.net
			info@olijethiopia.com
Mr.Siva		+251 11 618 4341	oromiawondres@yahoo.com
Ato. Mekonnen A.		+251 11 646 1105	rainfarm@ethionet.et
G.Symondson	Eryngiums, poinsettia	+251 11 551 4966	g.symondson@ethionet.et
"	"	"	g.Symondson@ethiopia.redfox.de
-	-	-	-
Ketema Alemayeh	Roses	+251 11 552 0596	roseethiopia@ethionet.et
Mr.K.Bhanu Prasad		+251 11 618 3063	roshanaroses@gmail.com
N.L Shyam Sundar	-		saifarms2006@gmail.com
Bruk Melese	Roses	+251 11 372 8135	saronfarm@ethionet.et
Clemence		+251 911 453 245	rotem@shebaflowers.com
Ermias Tadesse		+251 11 551 1835	sietagro@ethionet.et
Ken Murwayi	Roses		
		+251 011 662 8375	spirit@ethionet.et
Michael Asres /Paul Muteru	Roses		Mekiya@ethionet.et
Rakesh Kumar Gautam		+251 11 663 1144	suprafloritechplc@yahoo.co.in
		+251 11 551 2033	taborherb@ethionet.et
		+251 11 651 7394	tal@ethionet.et
		+251 11 553 4699	mekiya@ethionet.et
Ato Tesfaye		+251 (011) 372 0110	bap@ethionet.et
			uniflower@ethionet.et
Ato Yasin Igesse			yassinj@yahoo.com
Ato. Adiam Eyasu			adiam.Eyasu@gmail.com
Zubeda Kedir			
Tadesse Bekele	Roses		kajo@ethionet.
			teppo@ethionet.et
			mekia@ethionet.et
			peval@ethionet.et
		+251 11 652 5579 /64	yassinj@yahoo.com
		+251 11 618 7596	adiam.eyasu@gmail.com
		+251 46 441 4172	finzr@ethionet.et
		+251 11 466 4476	zkflowers@gmail.com
		+251 11 439 3470	kajo@ethionet.et

Enhancing crop productivity:

Syngenta East Africa Ltd unveils the green and anti-stress fungicide

At a much eagerly awaited growers' event held in Nairobi at the Serena Hotel, the Business Manager for Syngenta Lawn and Garden in East Africa, Mr. Victor Juma, led the Syngenta team and growers in introducing a new fungicide, Ortiva Top. The new product would endeavor to "revolutionize" disease control in the cut flowers and export vegetable crop sectors through its additional physiological benefits to the crops.

"Over the years, Syngenta has introduced several new products to the cut flower and export vegetable growers in Kenya. In a growing market, we are well positioned to deliver innovative solutions that meet market demands", remarked Victor, to the large audience that had gathered at the venue to witness the launch of the new fungicide. "We have dedicated our efforts to the cut flowers and export vegetables crop sectors by offering innovative solutions that can be seen through our elaborate product portfolio. In launching Ortiva Top, we are demonstrating our deep understanding of our customers by offering an innovative and winning solution in the management of powdery mildew, leaf spots and rusts in ornamental crops, peas and beans. Besides controlling key diseases, Ortiva Top is globally recognized as the "green and anti-stress fungicide" due to its additional crop enhancing effects.

Ortiva Top was unveiled in a grand style, never witnessed before by the stakeholders in the floriculture and export vegetables crop sectors, baffling all in attendance including the invited journalists from various media houses. As a sign of acceptance for the newly introduced product, the growers clapped heartily and rose up to a standing ovation.

Ortiva Top is globally recognized as the "green and anti-stress fungicide"

Speaking exclusively to Floriculture Magazine, a number of growers were full of praise for the new product. **Mr. Wilfred Munyao, the farm manager at Sian Roses, Maasai farm**, said that the introduction of Ortiva Top was indeed timely. He explained that the new product improves crop tolerance to water stress.

This attribute helps in improving crop production amidst the water stress challenges that growers continue to experience from time to time. "Ortiva Top will ensure that leaves stay green for longer and this enhances photosynthesis which is an important process for plant growth. Greener leaves for longer guarantees higher yields, longer stems and bigger buds", he further explained.

Mr. Charles Njuki from Finlays Horticulture, Kingfisher farm Naivasha, also expressed confidence in the newly launched product. He remarked, "Growers are resorting to the use of fewer molecules due to the stringent regulations by the European markets. The future is in the use of newer products like Ortiva Top which are broader in spectrum and thereby helping growers reduce the number of spray applications. Besides, with Ortiva top, there are also crop physiological benefits like better assimilation of nitrogen which is important in improving crop growth. This will definitely translate to improved crop yield and a better crop quality with reduced chemical sprays," he added.

Mr. Fred Okinda of Nini Farm, Naivasha, summed up the engaging lunch break debate by saying, "Protein is essential for all living organisms, and it is required for growth and development. Nitrogen is one of the main elements in protein. It is also a component of nucleic acid, DNA, RNA, genes, chromosomes, enzymes, chlorophyll, secondary metabolites (alkaloids), and amino acids. It is essential to plants and with products like Ortiva Top which help in the assimilation of these essential elements; you are definitely assured of quality produce."

In conclusion, Mr. Okinda said that Ortiva Top offers more than fungicidal benefits but also helps in optimizing physiological and biochemical processes in crops. Some of these benefits may include improved host plant tolerance to yield-robbing environmental stresses, such as drought, heat, cold temperatures, and ozone damage. Specifically, crops sprayed with Ortiva Top show improved plant utilization of nitrogen, increased photosynthetic rate, reduced rate of chlorophyll degradation, heightened plant defense systems against bacterial and viral infections, and enhanced water-use efficiency. These will often translate into healthier plants producing greater yields at harvest ("yield bump"), especially under stressful conditions.

During the discussions, **Mr. James Gacheru Kimani, Technical Manager at Windsor Flowers in Thika**, had this to say, "Growers preparing their spray programs can now have many options to choose from including the new superior formulation against powdery mildew. The product is a combination of two different active ingredients each with its own mode of action. The combination offers first class protection with a powerful curative action. Technically, it has set a new standard in disease control. Ortiva Top not only gives a fast and long acting control of the key diseases but also improves the overall appearance of the produce and prolongs shelf life. Produce that maintains a healthy look during distribution and display will have fewer complaints and losses from waste".

While delivering her address to the different stakeholders in attendance, **Ms. Susan Njoroge, the Technical Lead for Syngenta** in Kenya said, "At Syngenta we are certainly concerned with what our partners care about. Your comments, compliments and ideas have contributed to our growth, and today we have launched a top choice product against powdery mildew, leaf spots and rusts in ornamental crops, peas and beans. We are presenting to you the green and anti-stress fungicide, Ortiva Top. If you want to continue to grow your reputation in the market, then Ortiva Top is the top choice. The product is a broad spectrum, new fungicide mixture with systemic, translaminar and contact properties. The strong combination of protectant and curative activity makes it suitable at any timing within the program for the preventive and curative control of key diseases". She concluded after the very much successful launch.

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Tel: 0719 095000

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